

1 agggagaggc agtgaccatg aaggctgtgc tgcctgccc: gtagatggca  
 51 ggctggccc tgcagccagg cactgccc: ctgtgctact cctgcaaagc  
 101 ccaggtgagc aacgaggact gctgaggt ggagaactgc acccagctgg  
 151 gggagcagt ctggaccgcg cgcattccgc cagtggcct cctgaccgtc  
 201 atcagcaaag gctgagctt gaactgcgtg gatgactac aggactacta  
 251 cgtgggcaag aagaacatca cgtgctgtga caccgacttg tgcaacgcc  
 301 gcggggccca tgcctgcag ccggtgccc ccatcctgc gctgctccc  
 351 gcactcggcc tgcctgctgc gggaccggc cagctatagg ctctgggggg  
 401 ccccgctgca gccacactg ggtgtgtgtc ccaggccct tgtgccactc  
 451 ctacagaac ctggcccagt gggagcctgt cctggctcct gaggcacatc  
 501 ctaacgcaag ttgaccatg tatgttgca cccctttcc cnaaccctg  
 551 acctcccat gggcctttc caggattcc accnggcaga tcagttag  
 601 tganacana: ccgctgcag atggccctc caacntttt tgtgtgtgt  
 651 tccatggccc agcatttcc accttaacc ctgtgtcag gcactttc  
 701 cccaggaag cctccctgc ccaccccat tatgaattga gccagggtg  
 751 gtcctgtgtg tccccgcac ccagcagggg acaggcactc aggagggccc  
 801 agt222ggct gagatg22gt ggactgagta g22ctggagg ac22aggtg  
 851 acgtgagctc ctgggaggtt ccag22atg g22ctggagg cctgg22g22  
 901 ggggcccaggc ctacattg tggggctccc g22tggcagc ctgagc22g  
 951 cgtaggccct t22t22cac ctgnggata agcc22222 2222222

FIGURE 1A

MRALLALLMAGLALQPGTALLCYSCKAQVSNEDECLQV  
ENCTQLGEQCWTARIRAVGLLTVISKGCSLNCVDDS  
QDYVVGKKNITCCDLDLCNASGAHALQPAAAILALLPAL  
GLLLWGPGL

FIGURE 1B

1 ATGAAGACAGTTTTTTTTATCCTGCTGGCCACCTACTTAGCCCTGCATCCAGGTGCTGCT  
 TACTTCTGTCAAAAAAATAGGACGACCGGTGGATGAATCGGGACGTAGGTCCACGACGA 60  
 M K T V F F I L L A T Y L A L H P G A A  
 61 CTGCAGTGCTATTTCATGCACAGCACAGATGAACAACAGAGACTGTCTGAATGTACAGAAC  
 GACGTACAGATAAGTACGTGTCGTGTCTACTTGTGTCTCTGACAGACTTACATGTCTTG 120  
 L Q C Y S C T A Q M N N R D C L N V Q N  
 121 TGCAGCCTGGACCAGCACAGTTGCTTTACATCGCGCATCCGGGCCATTGGACTCGTGACA  
 ACGTCGGACCTGGTCGTGTCAACGAAATGTAGCGCGTAGGCCCGGTAACCTGAGCACTGT 180  
 C S L D Q H S C F T S R I R A I G L V T  
 181 GTTATCAGTAAGGGCTGCAGCTCACAGTGTGAGGATGACTCGGAGAACTACTATTGTTGGG  
 CAATAGTCATTCCCGACGTGAGTGTACACTCCTACTGAGCCTCTTGATGATAAACCCG 240  
 V I S K G C S S Q C E D D S E N Y Y L G  
 241 AAGAAGAACATCACGTGCTGCTACTCTGACCTGTGCAATGTCAACGGGGCCACACCCCTG  
 TTCTTCTTGTAGTGACGACGATGAGACTGGACACGTTACAGTTGCCCGGGTGTGGGAC 300  
 K K N I T C C Y S D L C N V N G A H T L  
 301 AAGCCACCCACACCCCTGGGGCTGCTGACCGTGCTCTGCAGCCTGTTGCTGTGGGGCTCC  
 TTCGGTGGGTGGTGGGACCCCGACGACTGGCACGAGACGTCCGACAACGACACCCCGAGG 360  
 K P P T T L G L L T V L C S L L L W G S  
 361 AGCCGTCTGTAGGCTCTGGGAGAGCCTACCATAGCCCGATTGTGAAGGGATGAGCTGCAC  
 TCGGCAGACATCCGAGACCCTCTCGGATGGTATCGGGCTAACACTTCCCTACTCGACGTG 420  
 S R L  
 421 TCCACCCACCCACACAGG 441  
 AGGTGGGGTGGGGGTGTGTCC

FIGURE 2

1 M K I F L P V T T R A X L N G V S R A S S hSCA-2  
 1 M K A V L L A L L M A G E A L O P G T A NPSCA  
 1 M K T V L L L L L A T Y T A L H P G A A mPSCA  
  
 21 L M C F S C L N Q K S N L Y C E K P T I  
 21 L L C Y S C K A Q V S N E D C L Q V E N  
 21 L O C Y S C T A Q M N N R D C L N V Q N  
  
 41 C S D Q D N Y C V T V S A S X G I G N L  
 41 C T O L G E Q C W T A R I R A V G L L T  
 41 C S L O Q H S C F T S R L R A I G L V T  
  
 61 V T F G H S L S K T C S P A C P I P E G  
 61 V - - - - I S K G C S L N C V D D S Q  
 61 V - - - - I S K G C S S Q C E D D S E  
  
 81 V N V G V A S H G I S C C Q S F L C N F  
 76 D Y Y V G K K - N L T C C O T D L C N A  
 76 N Y Y L G K K - N L T C C Y S D L C N V  
  
 101 S A A D G G L R A S V T F F G A G G L L  
 95 S G A H A L O P A A A L L A L L P A E G  
 95 N G A E T L K P P T T L G G R T V E C S  
  
 121 S L L P A L L R E G P  
 115 L L L N G P G Q L - -  
 115 L L L N G S S R L - -

FIGURE 3

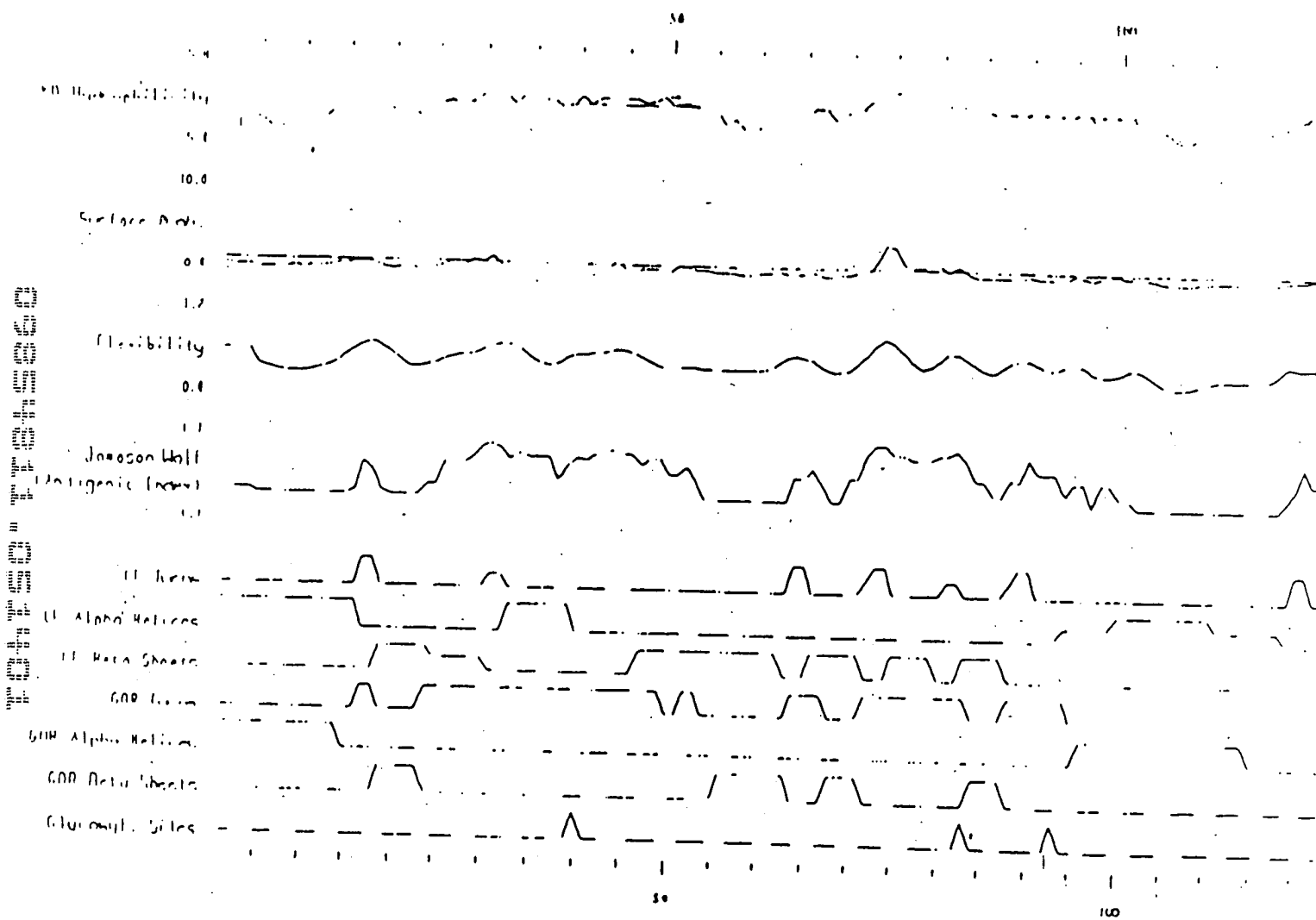


FIGURE 4

↑  
signal  
sequence

✓ = glycosylation  
site

✓

✓ GPI signal

FIGURE 5

Western ASCA  
 supposed to be 80% AB  
 Normal tissue  
 1hr exp

1G8  
 1:100

prostate (Humer)  
 prostate (Baker)  
 prostate (Gek)  
 Bladder (Humer)  
 Bladder (Gek)  
 Bladder (Rok)  
 Kidney (NIH04)  
 Kidney (WU2)  
 Testis  
 Sm. Intest.

LA PC9

FIGURE 6

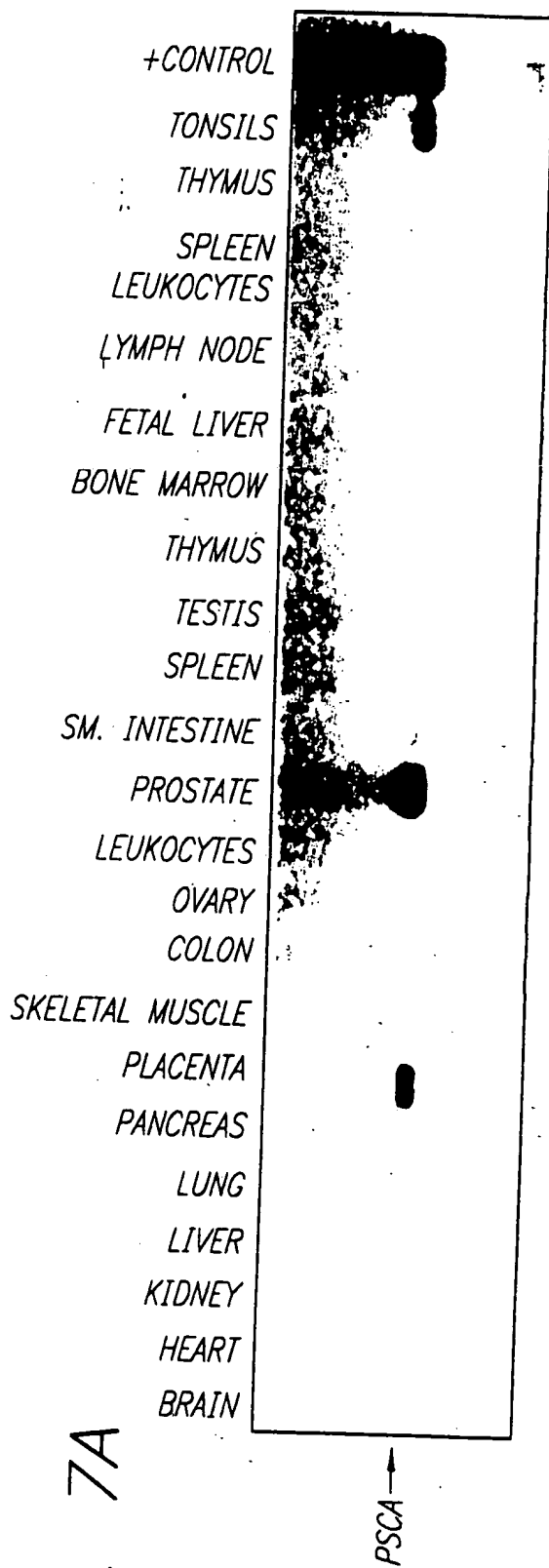


FIG. 7A

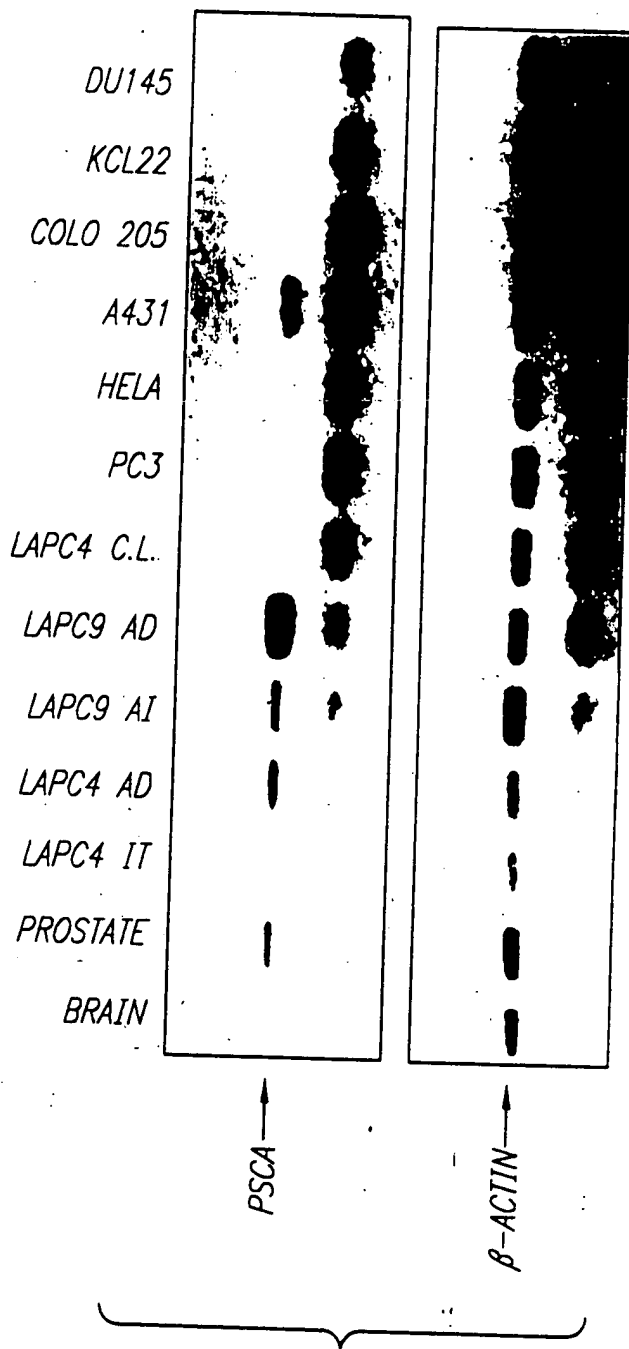




FIG. 7B



FIG. 8A

Legend:  untranslated region of pSCA

 translated region of pSCA

246 bp

FIG. 8A

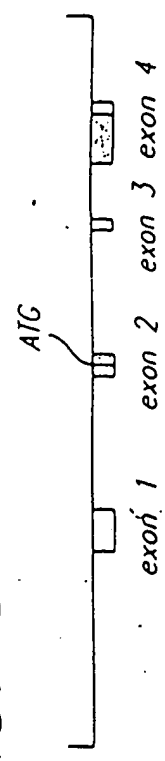


FIG. 8B

murine pSCA

FIGURE 8

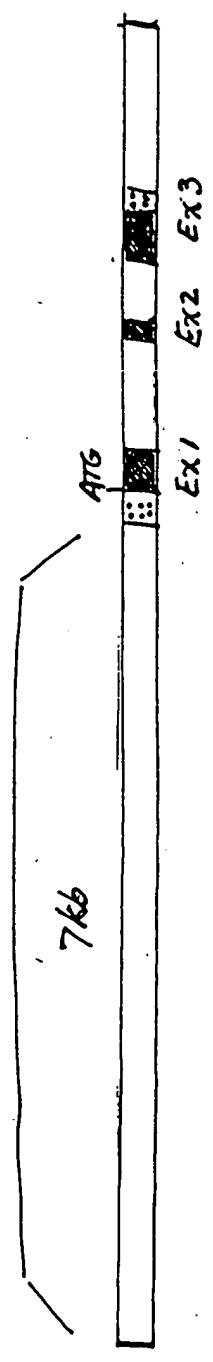
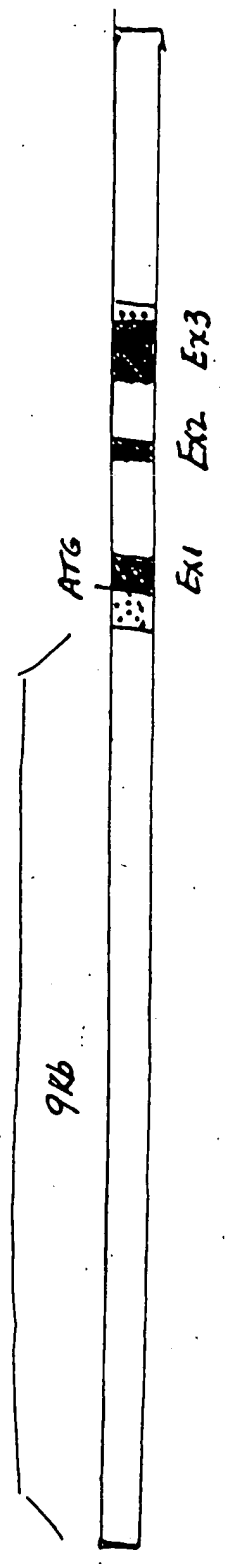


FIG. 8C

human pSCA



# PSCA / PSA Expression in Benign Prostate vs. Prostate Cancer Xenograft

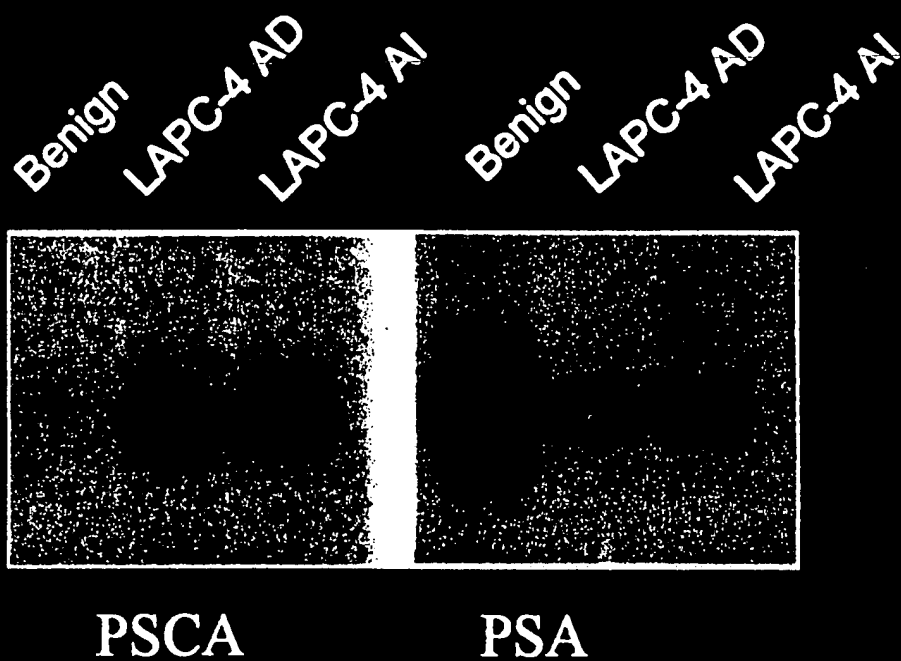
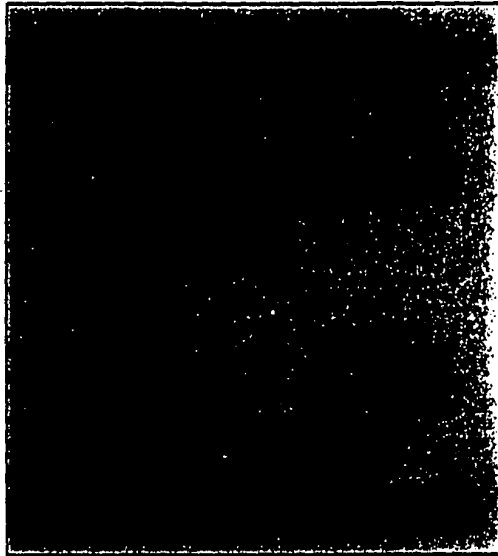


FIGURE 9A

~ 1kb

PANCREAS  
KIDNEY  
SKELETAL MUSCLE  
LIVER  
LUNG  
PLACENTA  
BRAIN  
HEART



PERIPHERAL LEUKOCYTES  
COLON  
SMALL INTESTINE  
OVARY  
TESTIS  
PROSTATE  
THYMUS  
SPLEEN

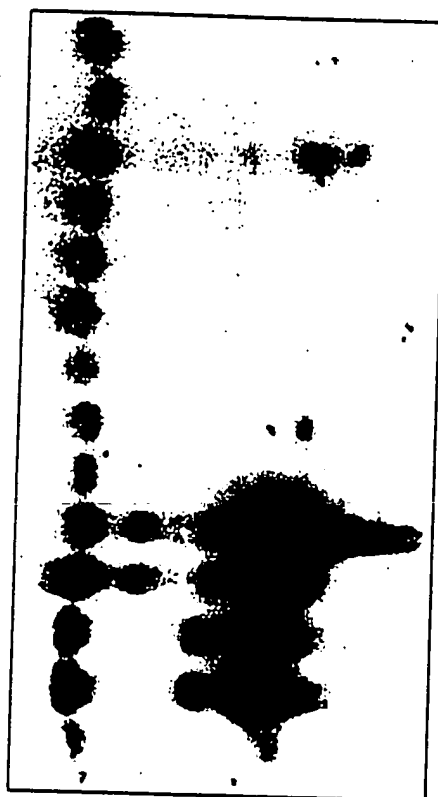


PSCA

FIG. 9B

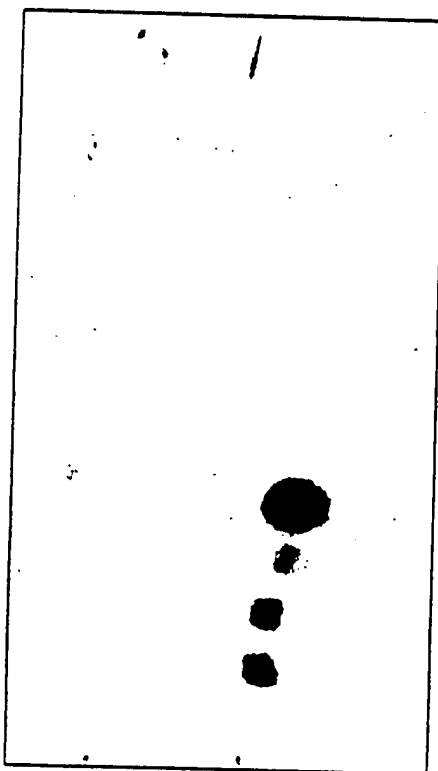
72 HRS

KCL22  
 COLO 205  
 A431  
 HELA  
 DU145  
 PC3  
 LNCAP  
 LAPC4 C.L.  
 LAPC3 AI  
 LAPC9  
 LAPC4 IT  
 LAPC4 AI  
 LAPC4 AD  
 BPH



4 HRS

KCL22  
 COLO 205  
 A431  
 HELA  
 DU145  
 PC3  
 LNCAP  
 LAPC4 C.L.  
 LAPC3 AI  
 LAPC9  
 LAPC4 IT  
 LAPC4 AI  
 LAPC4 AD  
 BPH



PSCA

FIG. 10-1

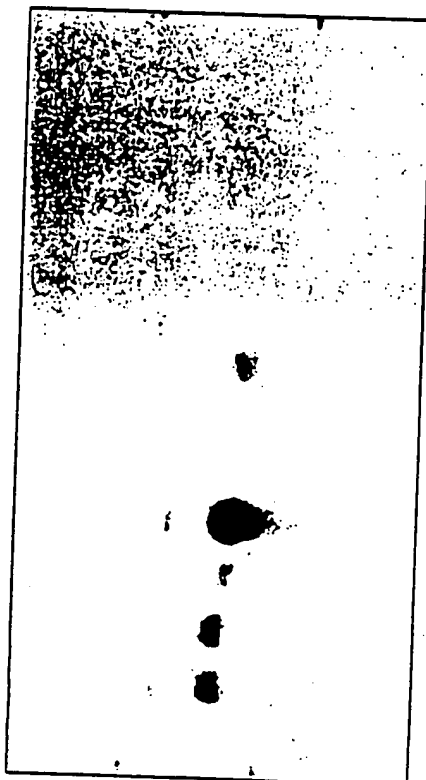
72 HRS

KCL22  
COLO 205  
A431  
HELA  
DU145  
PC3  
LNCAP  
LAPC4 C.L.  
LAPC3 AI  
LAPC9  
LAPC4 IT  
LAPC4 AI  
LAPC4 AD  
BPH



4 HRS

KCL22  
COLO 205  
A431  
HELA  
DU145  
PC3  
LNCAP  
LAPC4 C.L.  
LAPC3 AI  
LAPC9  
LAPC4 IT  
LAPC4 AI  
LAPC4 AD  
BPH



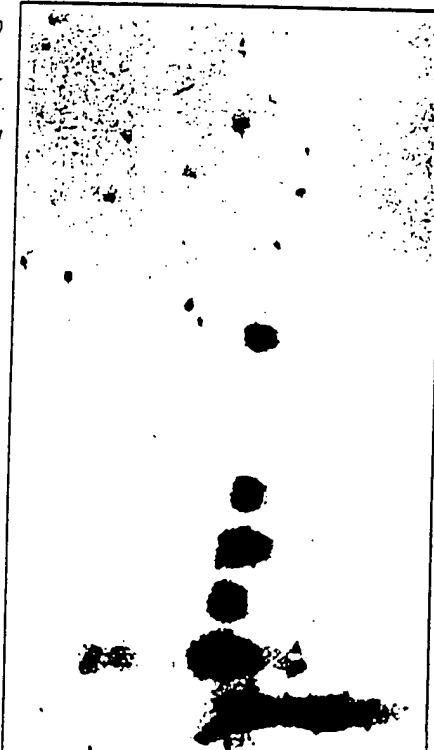
PSM

FIG. 10-2

KCL22  
COLO 205  
A431  
HELA  
DU145  
PC3  
LNCAP  
LAPC4 C.L.  
LAPC3 AI  
LAPC9  
LAPC4 IT  
LAPC4 AI  
LAPC4 AD  
BPH

4 HRS

KCL22  
COLO 205  
A431  
HELA  
DU145  
PC3  
LNCAP  
LAPC4 C.L.  
LAPC3 AI  
LAPC9  
LAPC4 IT  
LAPC4 AI  
LAPC4 AD  
BPH



PSA

ETBR

FIG. 10-3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100



FIG. 11B

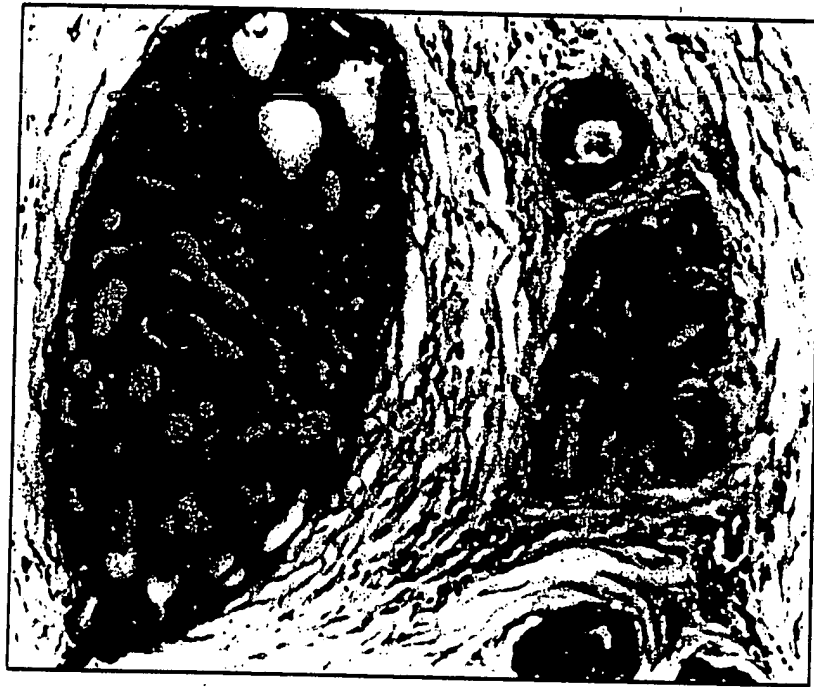


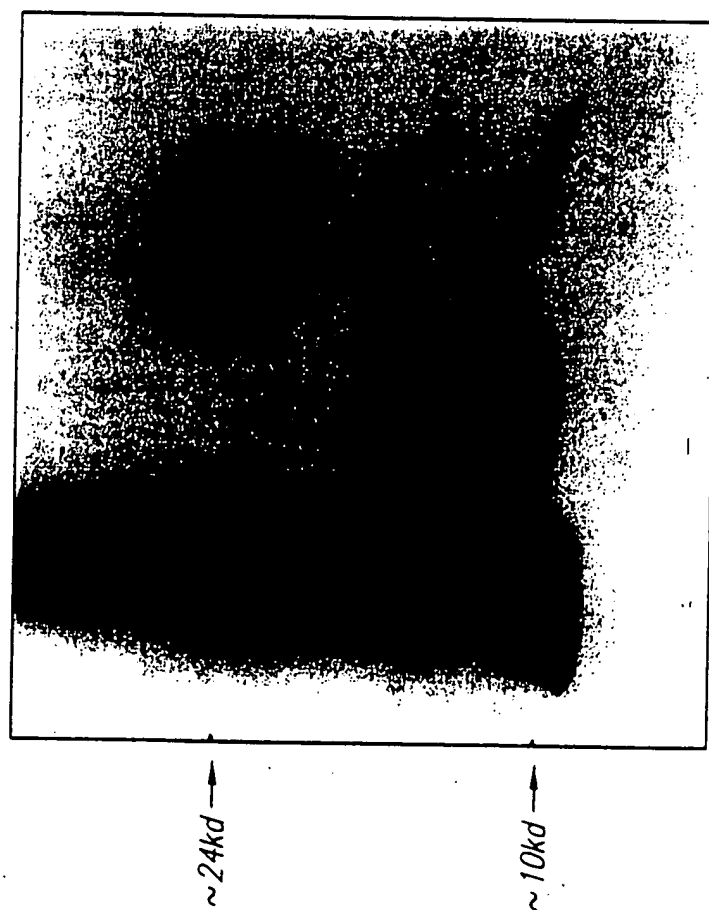
FIG. 11C



FIG. 12A

*N* GLYCOSIDASE F

CONTROL

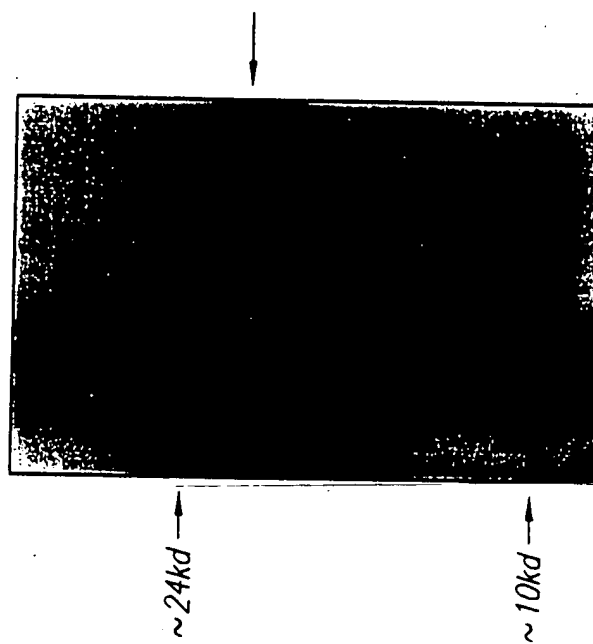


~24kd-

~ 10kd -

CELL ASSOCIATED

*SECRETED*



~24kd -

~ 10kd -

FIG. 12B

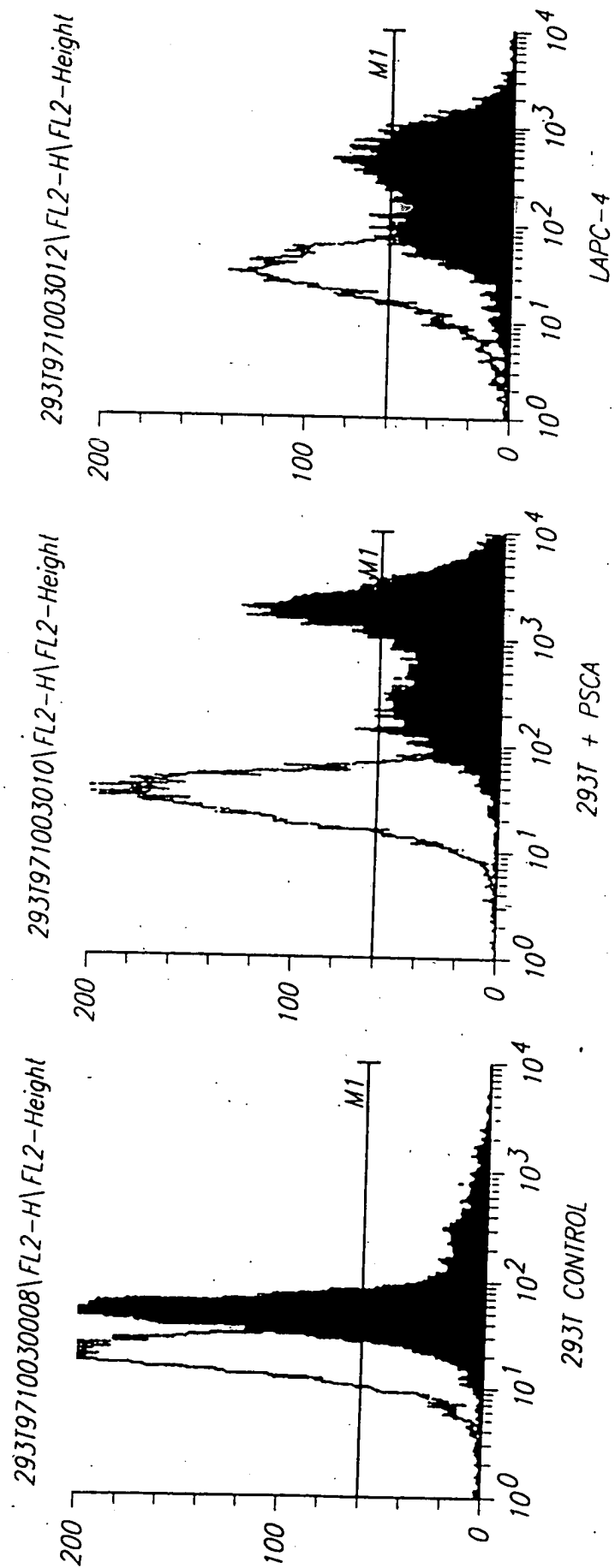
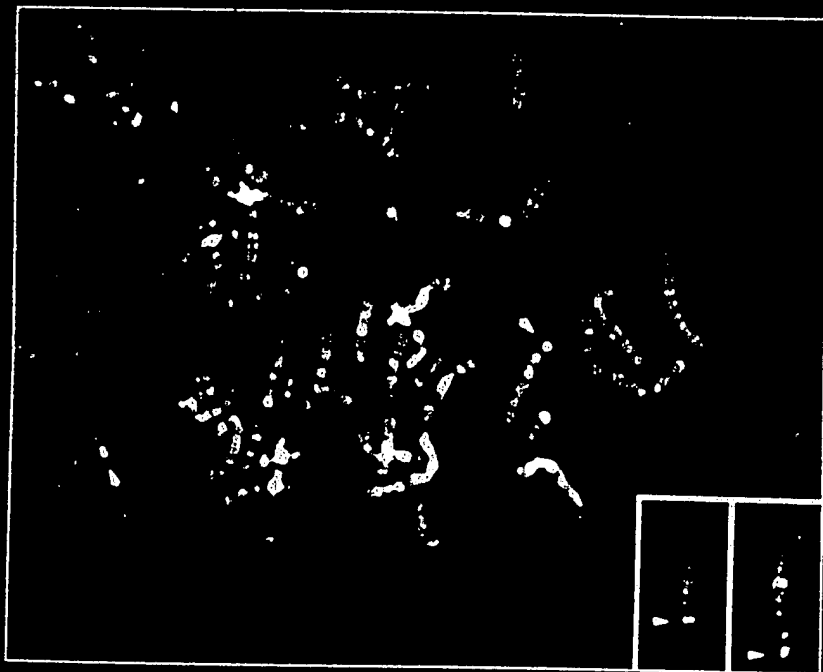


FIGURE 12C

## PSCA Maps to Chromosome 8q24.2



Fluorescent  
in Situ Hybridization  
Analysis of PSCA

FIGURE 13

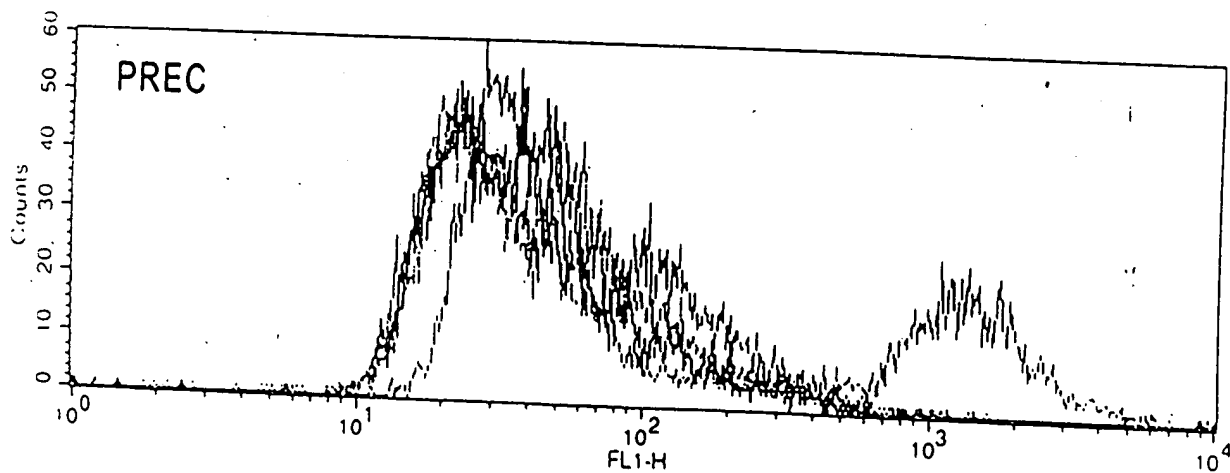
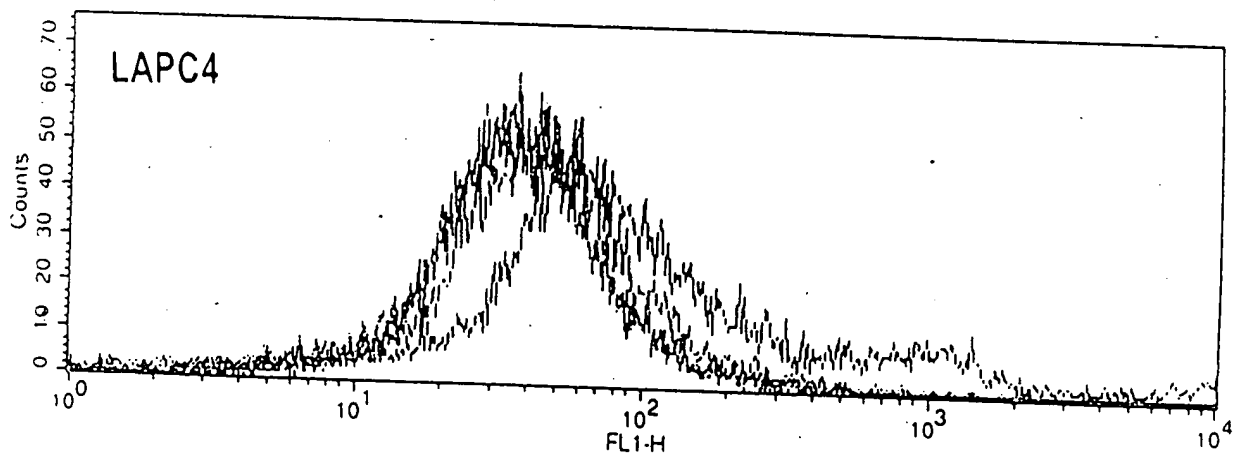
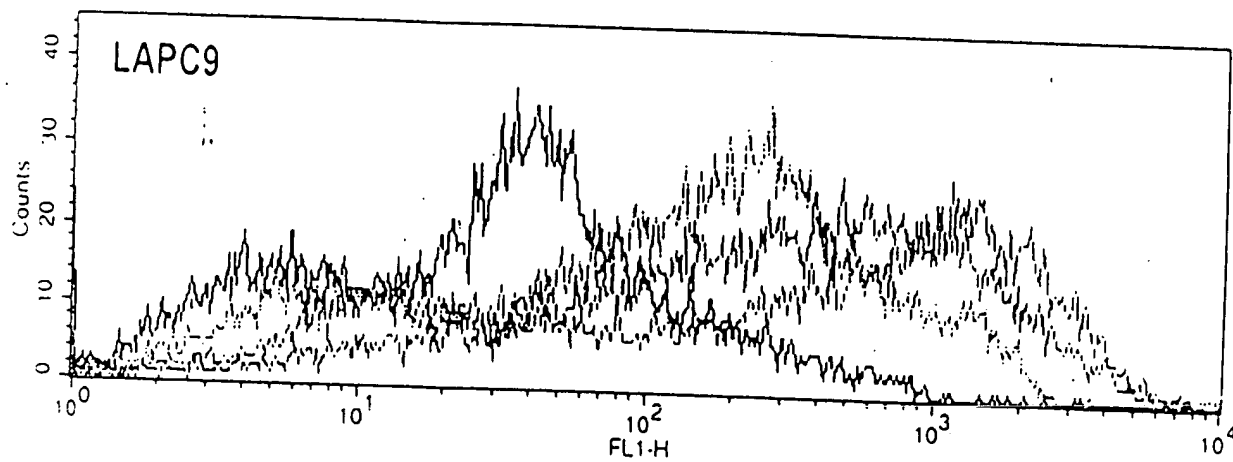


FIGURE 14

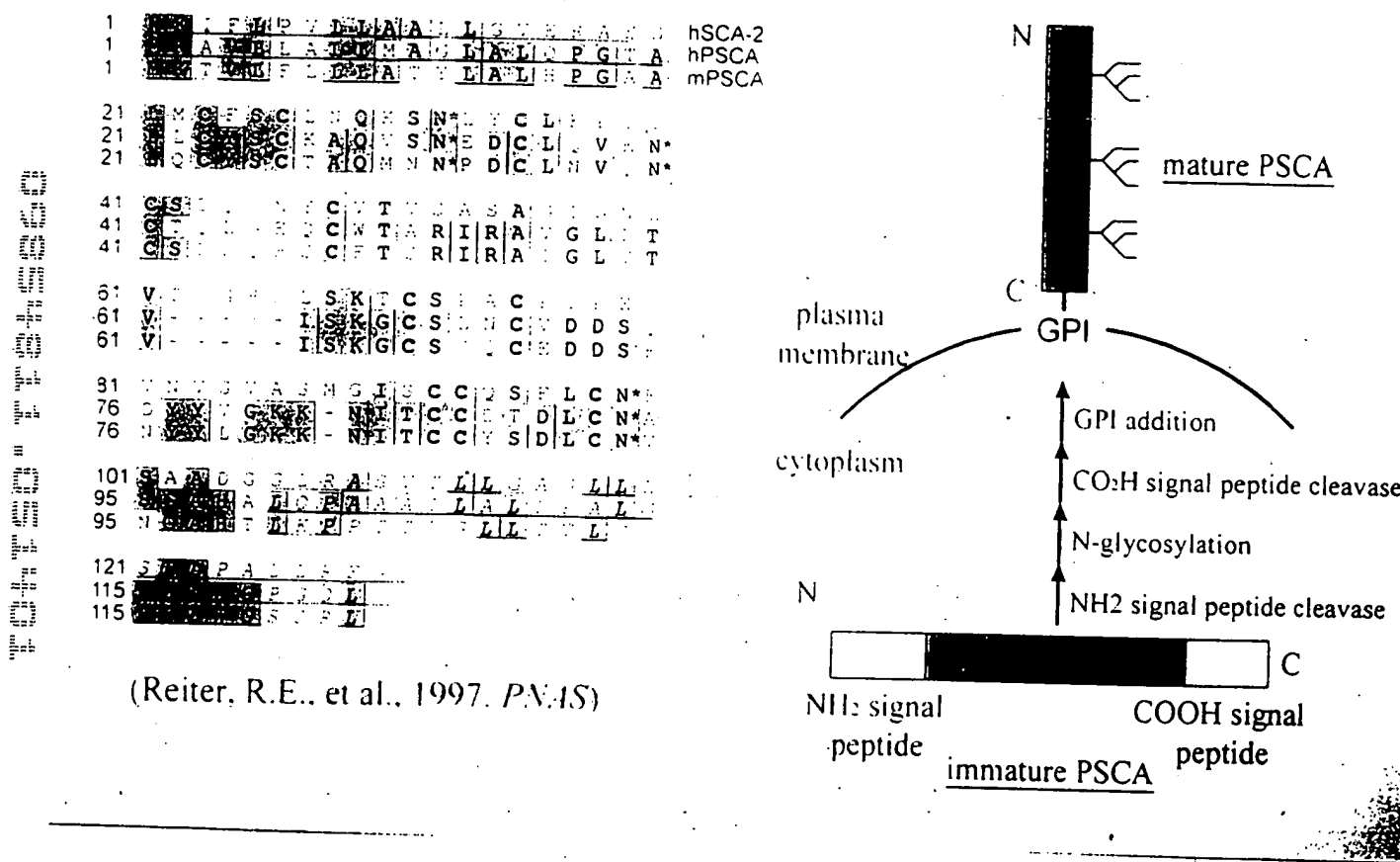
[illegible]

mAb	Isotype	FL (18-98)	N (2-50)	M (46-109)	C (85-123)
1G8	IgG1	2.039	0.007	0.628	0.000
2H9	IgG1	1.318	0.863	0.032	0.021
3C5	IgG2a	2.893	1.965	0.016	0.005
3E6	IgG3	0.328	0.024	0.069	0.370
4A10	IgG2a	2.039	1.315	0.000	0.014
2A2	IgG2a	1.366	0.733	0.010	0.003
3G3	IgG2a	2.805	1.731	0.004	0.000

1G8	2A2	2H9	3C5
F N M C	F N M C	F N M C	F N M C
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3E6	3G3	4A10	
F N M C	F N M C	F N M C	
[REDACTED]	[REDACTED]	[REDACTED]	

FIGURE 15

# Prostate Stem Cell Antigen (PSCA) is a GPI-anchored Protein



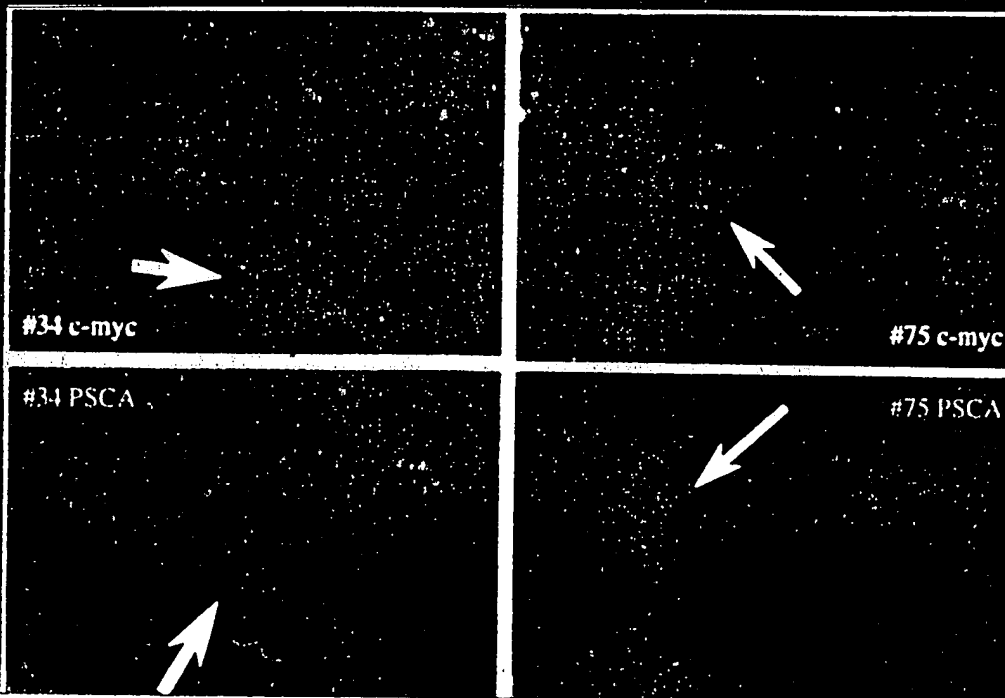
(Reiter, R.E., et al., 1997. *PNAS*)

FIGURE 16

# FISH Analysis of PSCA and c-myc in Prostate Cancer

Gain Chromosome 8

Amplification



*R. Jenkins*

FIGURE 17

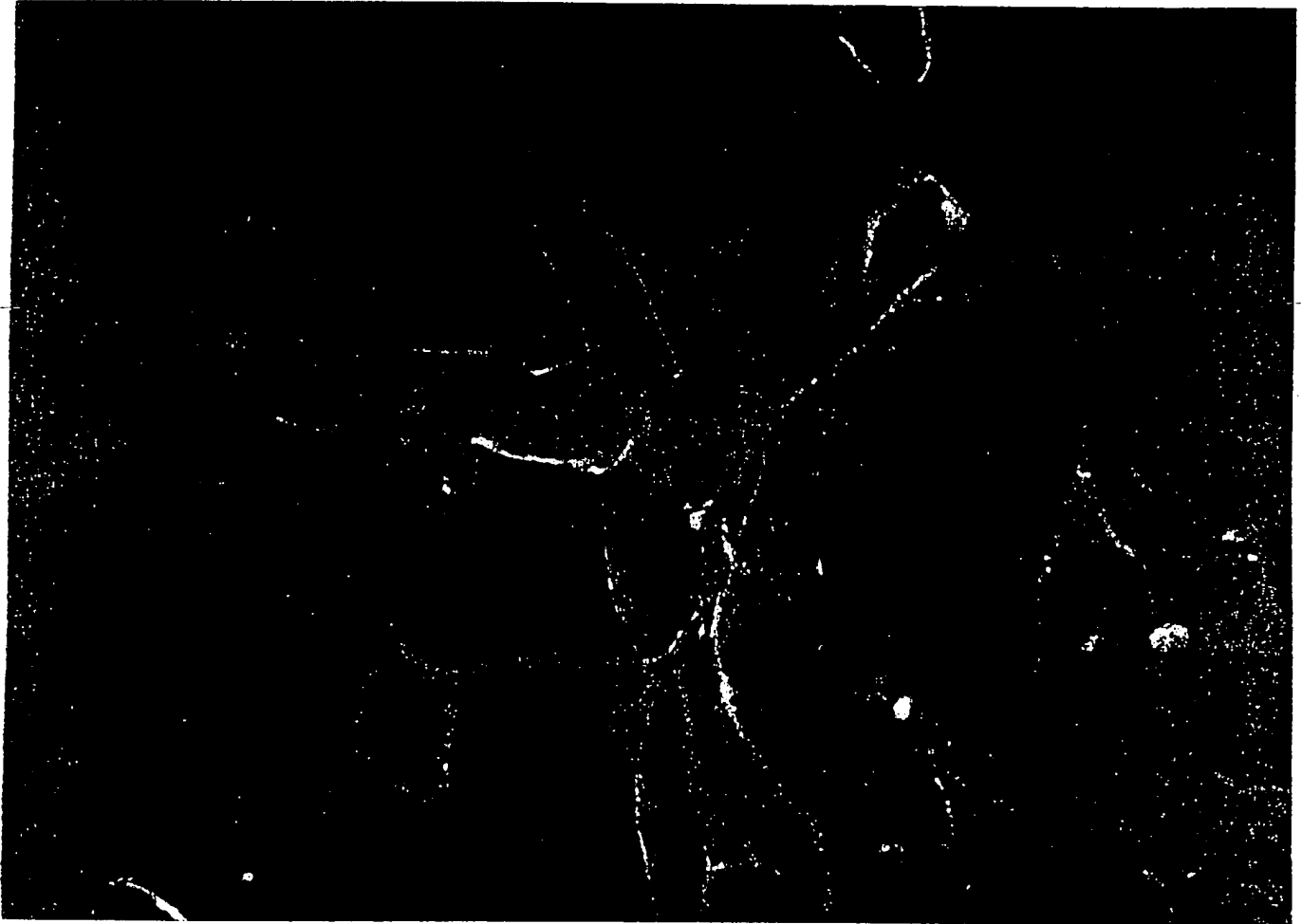


FIGURE 18



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

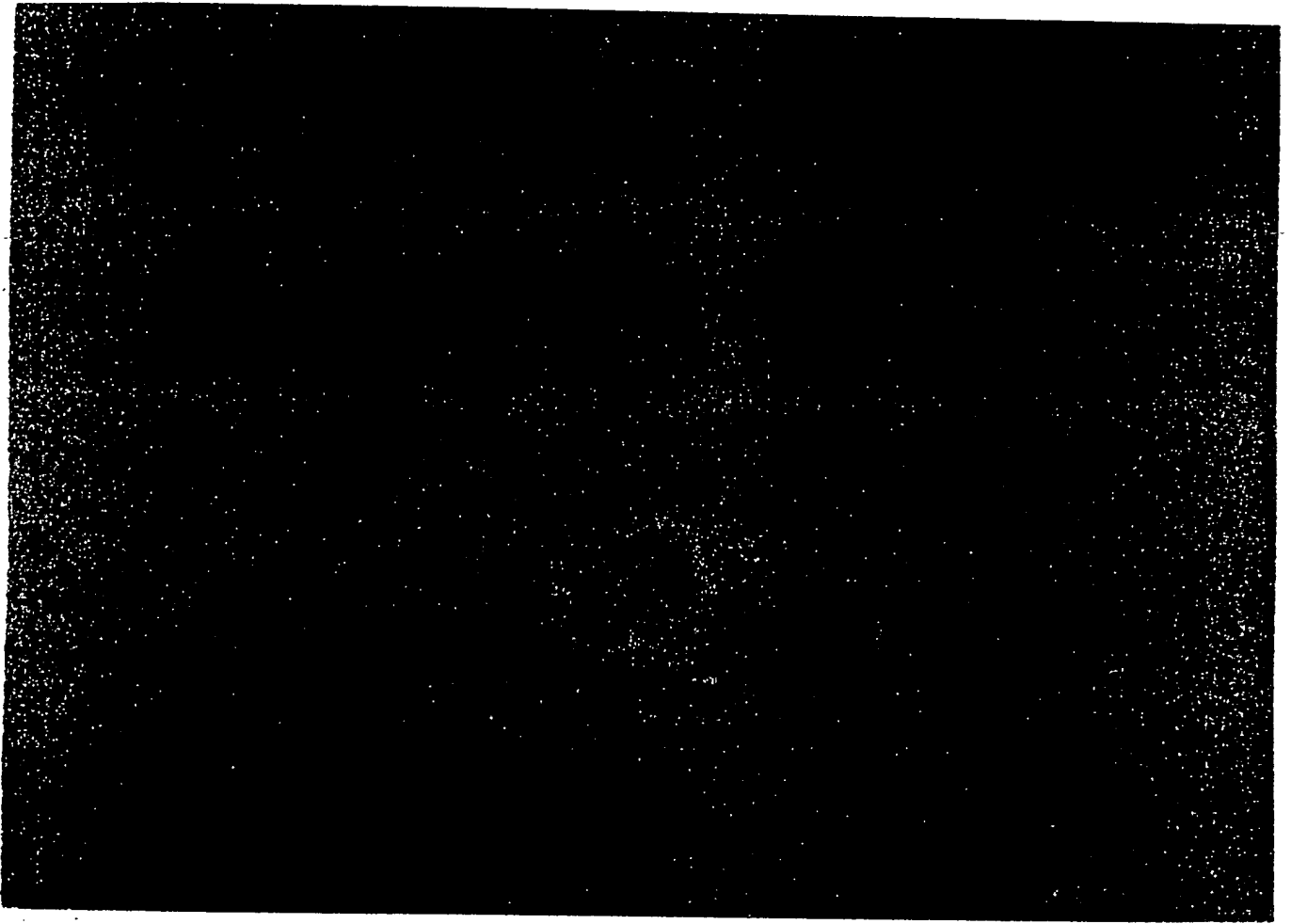


FIGURE 19

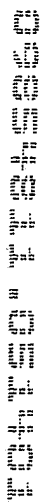


FIGURE 20

## PSCA Immunostaining of Primary Tumors

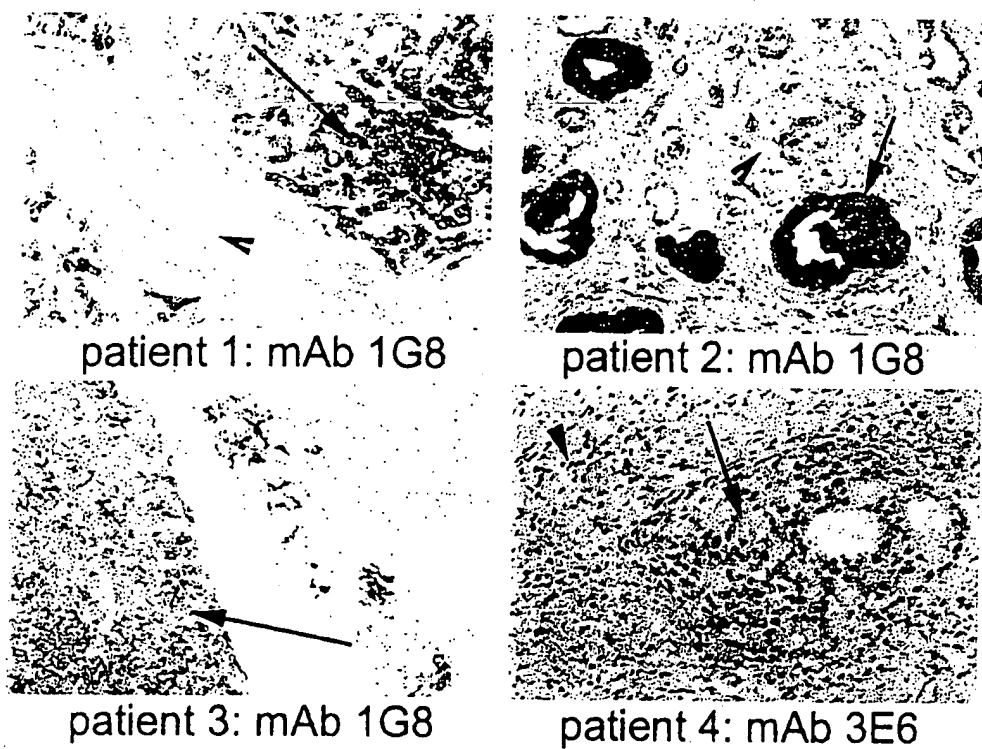


FIGURE 21



**FIGURE 22**

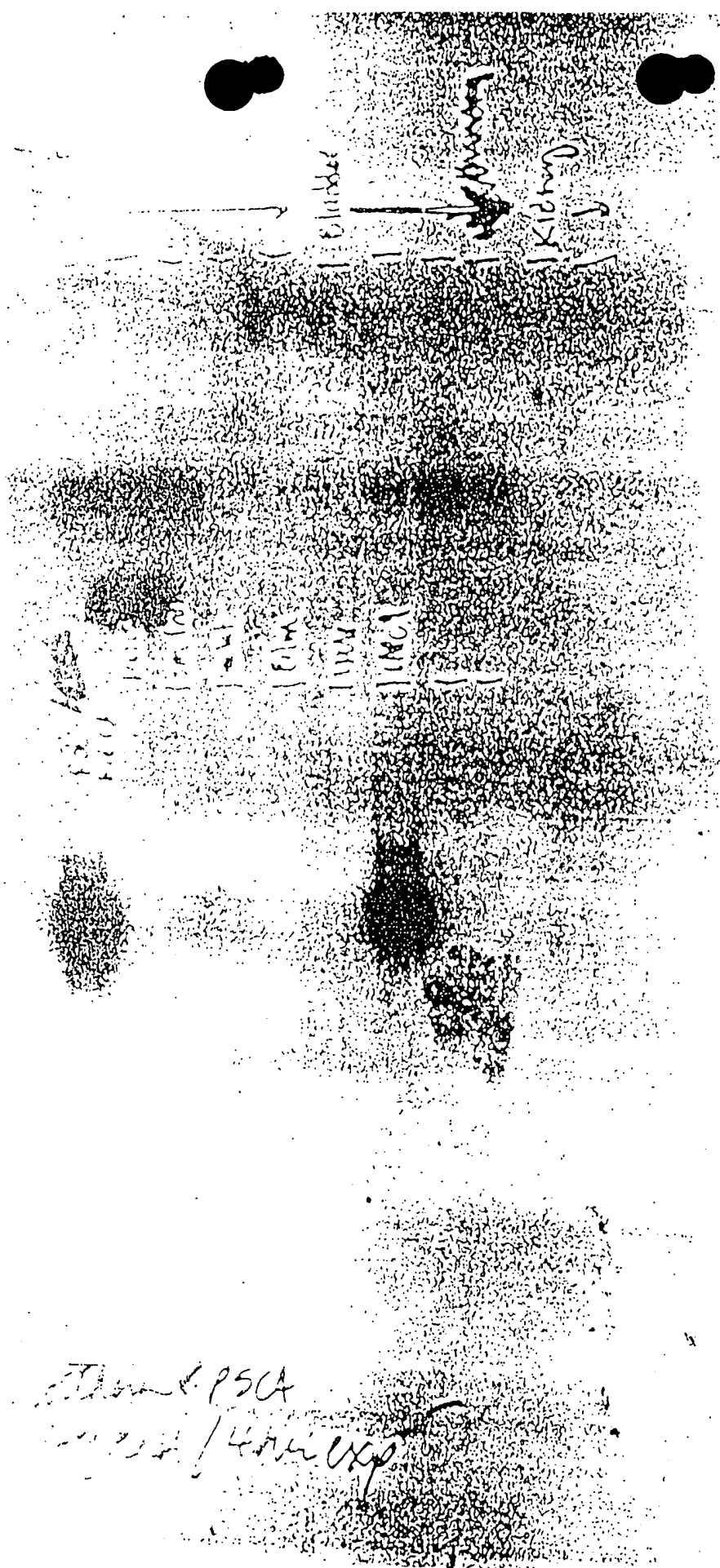


FIGURE 23

This is a high-contrast, black-and-white micrograph, possibly a histological section. It displays several cross-sections of biological structures, likely cells or tissues. The structures are characterized by prominent, dark, irregular borders and lighter, textured interiors. Some structures show internal detail, such as small dark spots or granules. The background is a light, speckled texture. The overall appearance is that of a high-magnification view of biological material, possibly stained for contrast.

FIGURE 24

0985434 054434



Thom & PSCA  
10/22/11 / 4000 EXP

FIGURE 25



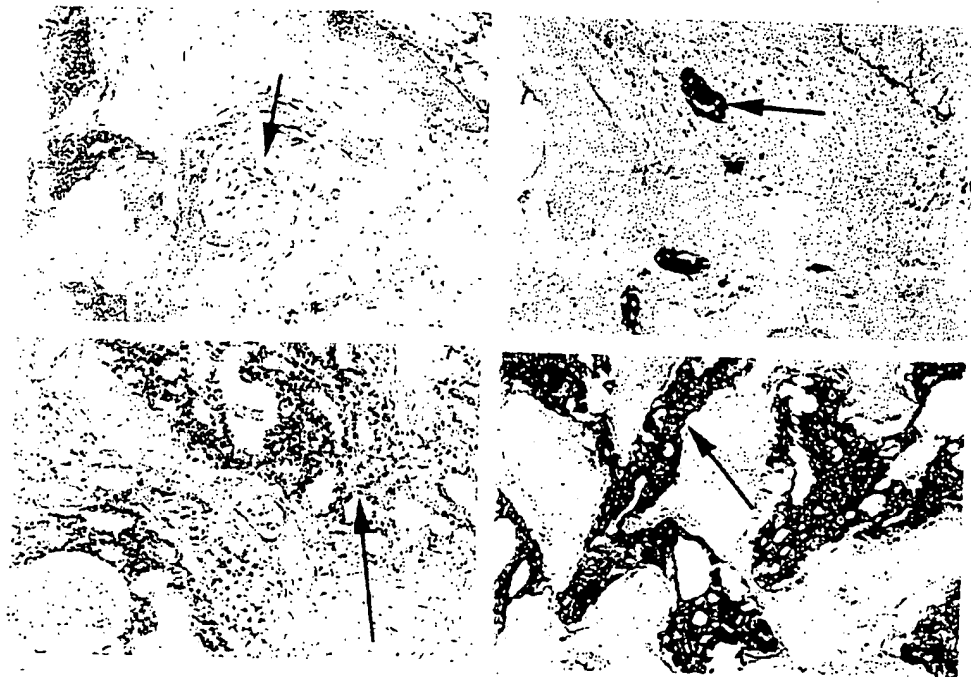
FIGURE 26



A high-contrast, black and white photograph of a large, irregularly shaped, light-colored object, possibly a piece of debris or a biological specimen, set against a dark background. The object has a rough, textured surface with many small, dark spots and a prominent, bright white area near the top right.

FIGURE 27

## PSCA Immunostaining of Bony Metastases



Patient 5: H and E  
and mAb 1G8

Patient 4: H and E  
and mAb 3E6

FIGURE 28

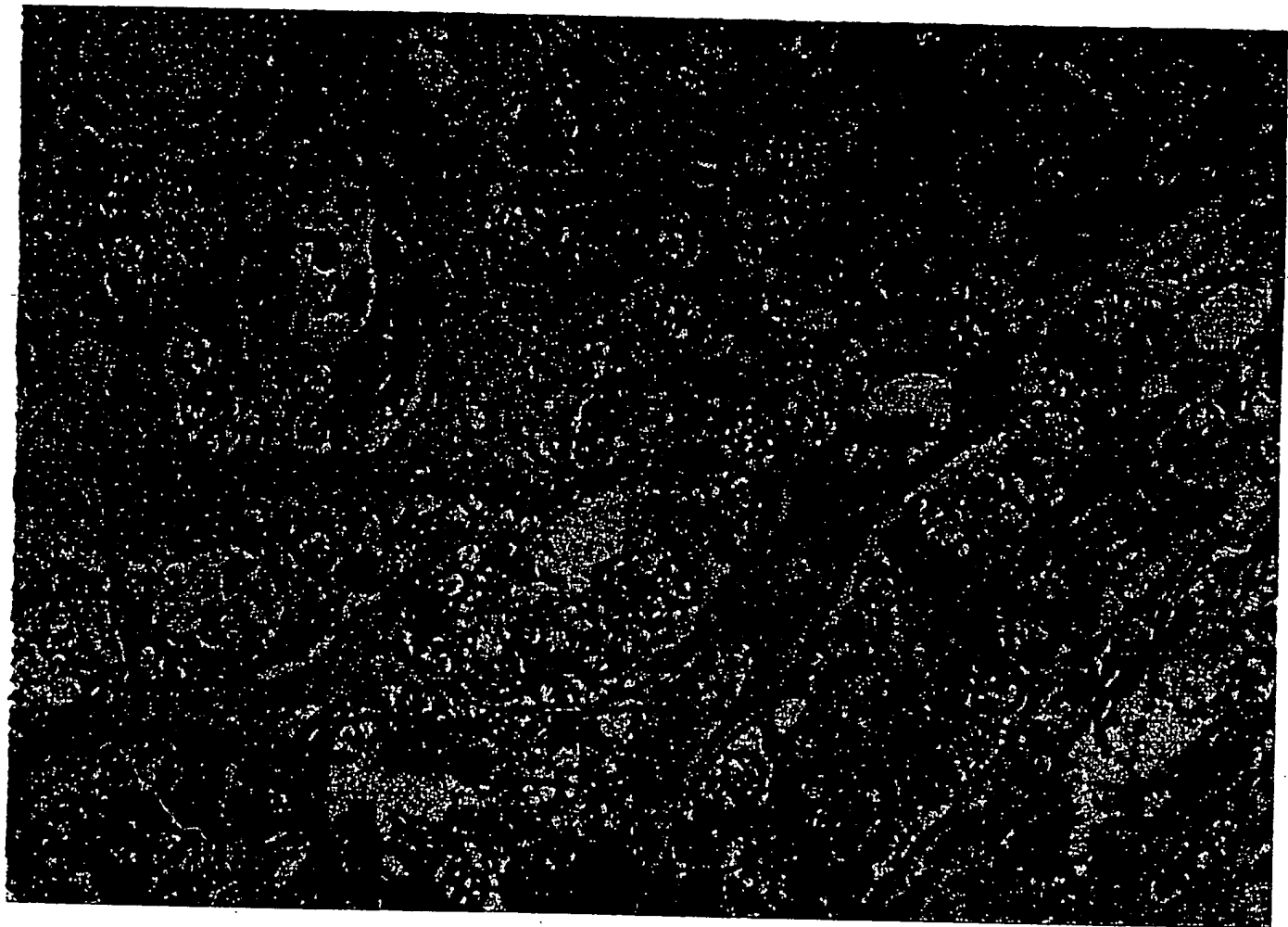


FIGURE 29



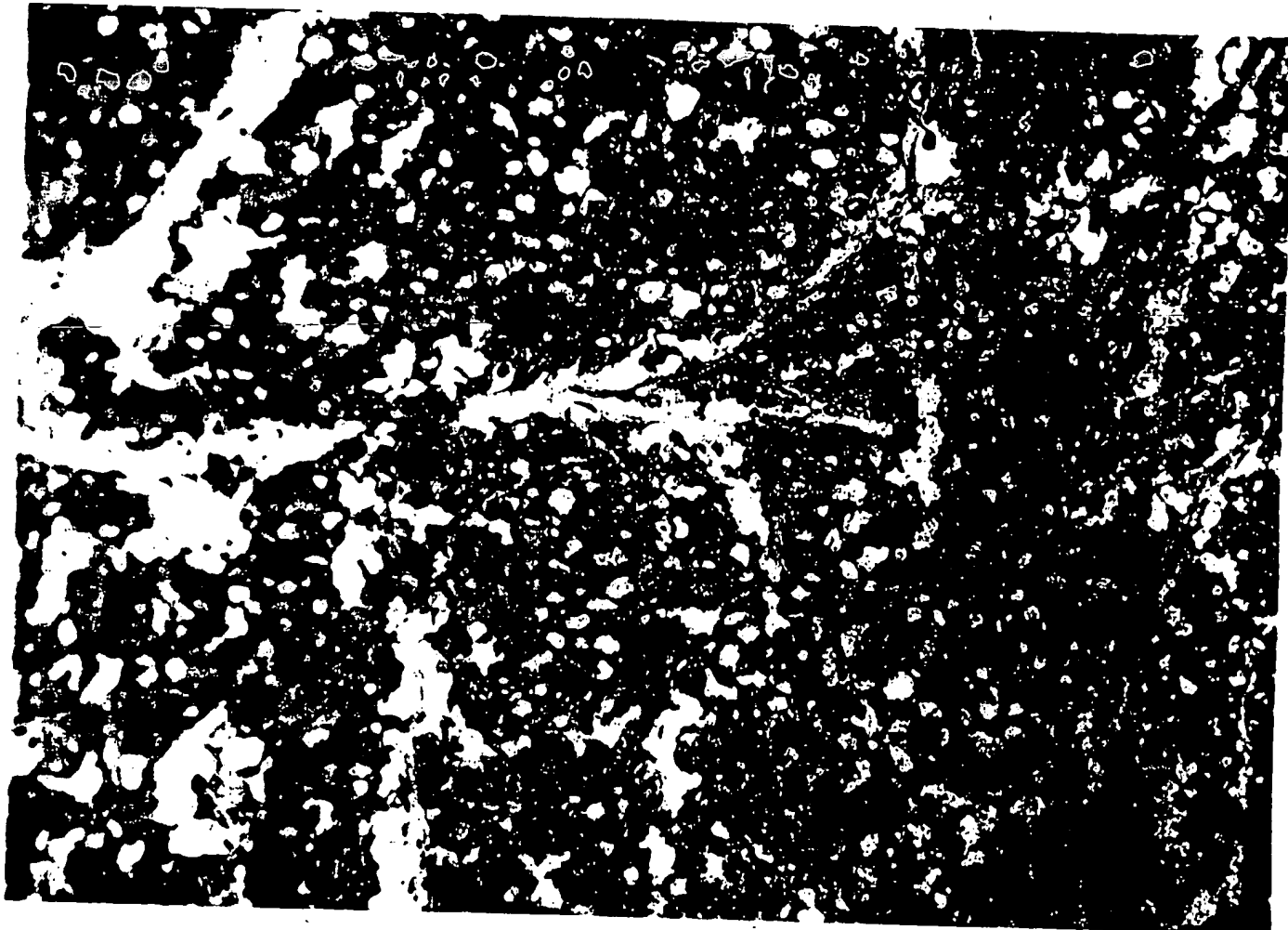
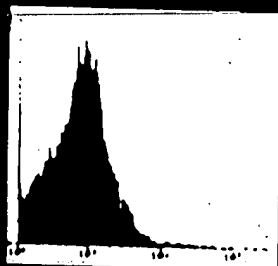


FIGURE 31

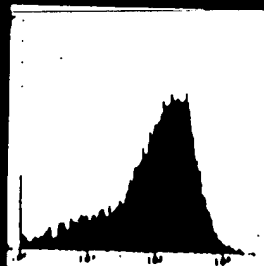
FIGURE 32

# PSCA Expression in LAPC-9 Xenograft by FACS

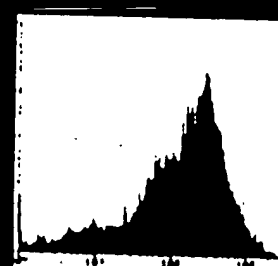
Secondary Antibody



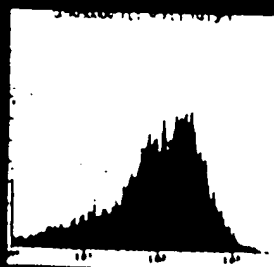
1G8



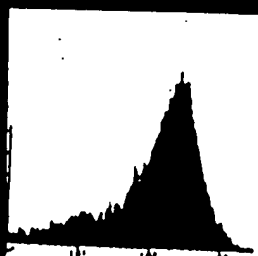
2H9



4A10



3C5



3E6



FIGURE 33

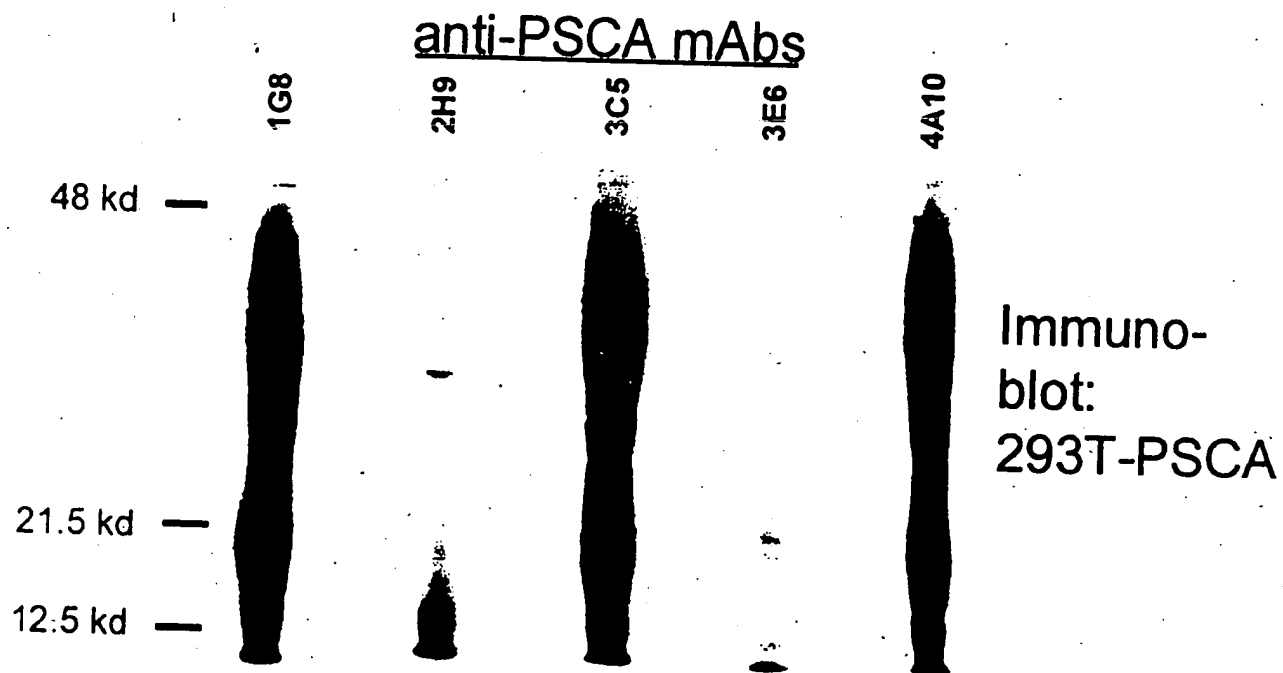


FIGURE 34



## Immunofluorescent Staining of LNCaP-PSCA Cells

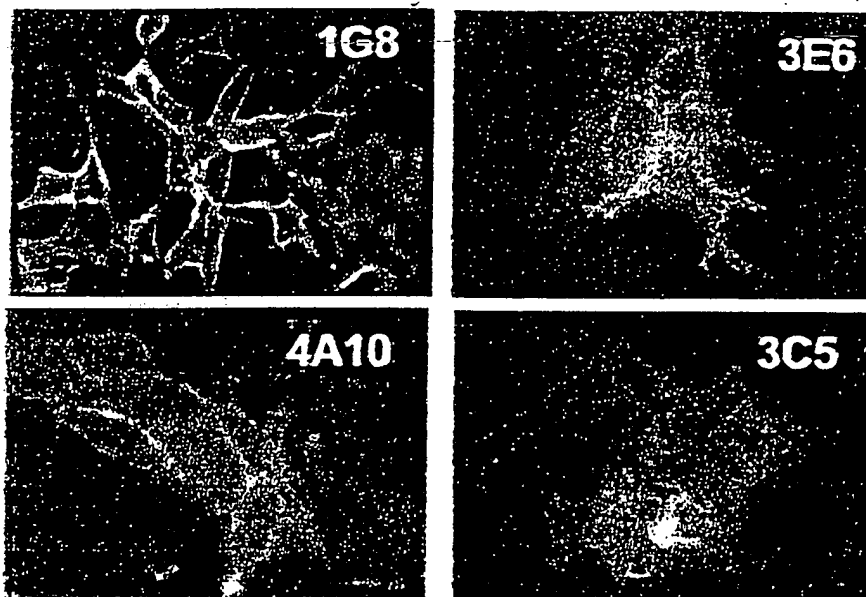


FIGURE 35

100-443680-100

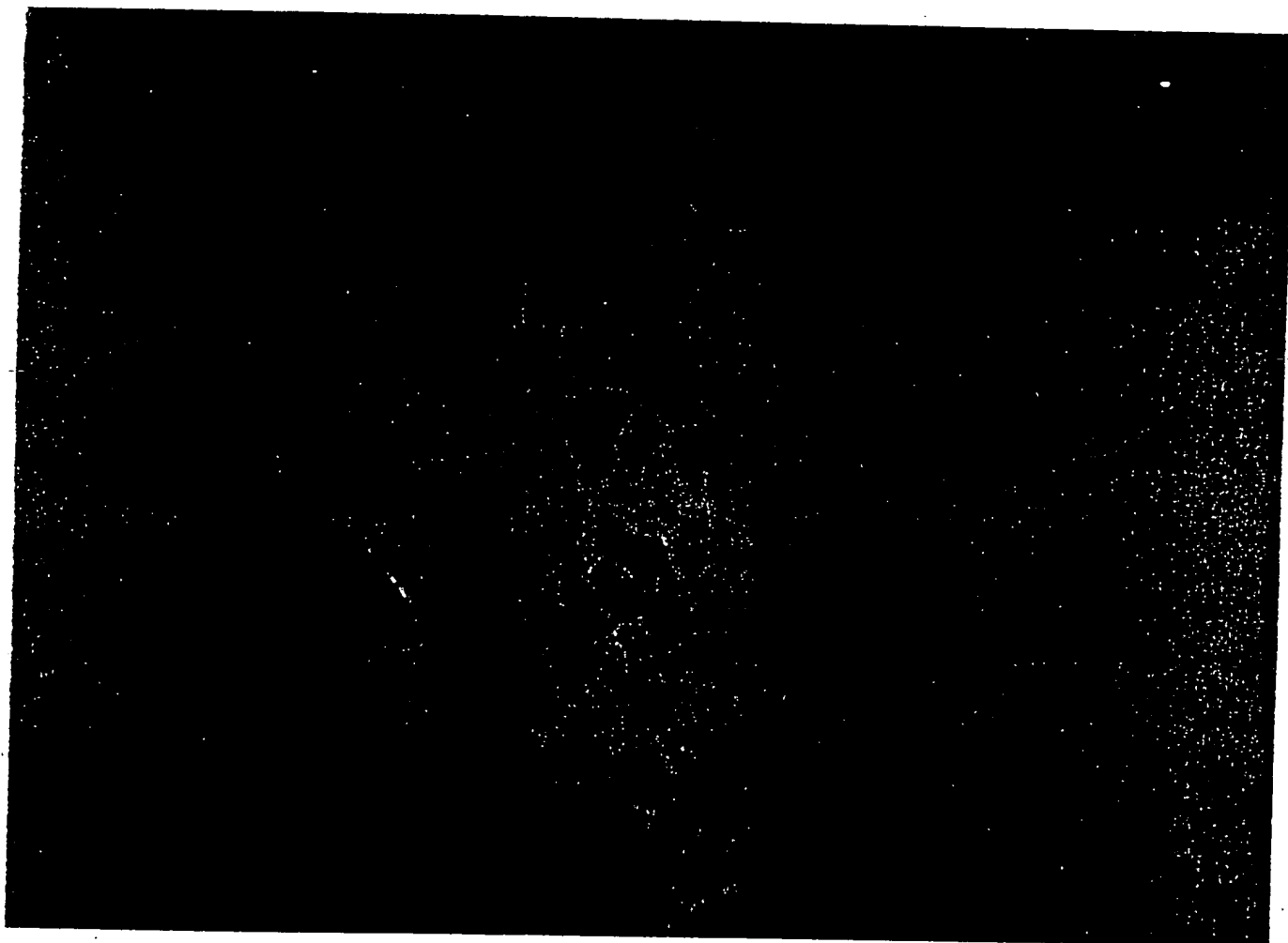


FIGURE 36

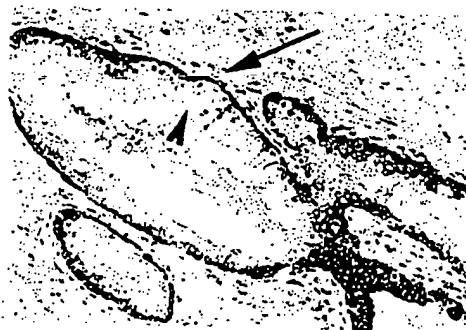


## Immunohistochemical Staining of Normal Prostate

Normal: Isotype Control



Normal: PSCA mAb 3E6



Normal: PSCA mAb 1G8



Atrophy: PSCA mAb 2H9

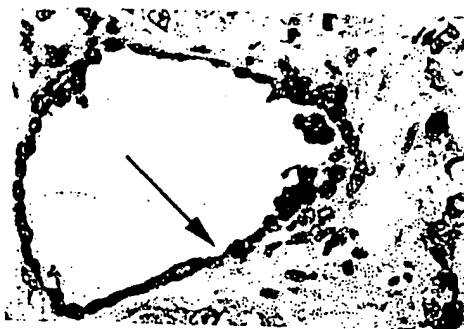
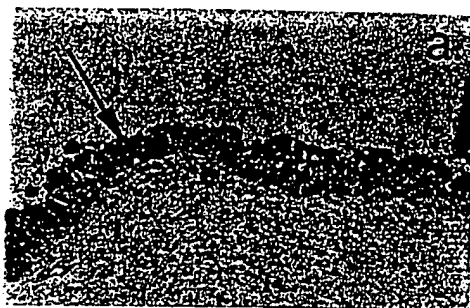
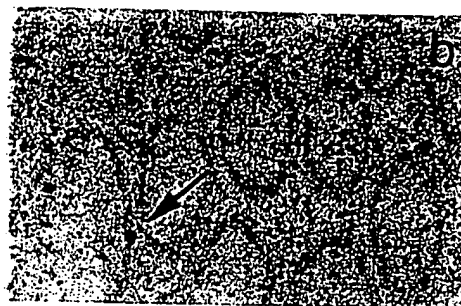


FIGURE 38

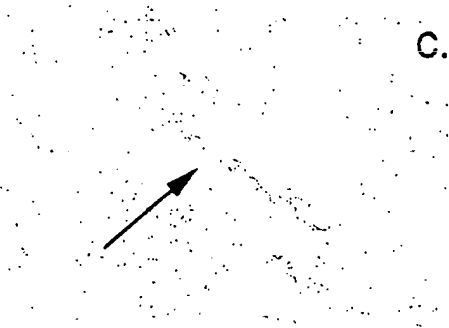
A.



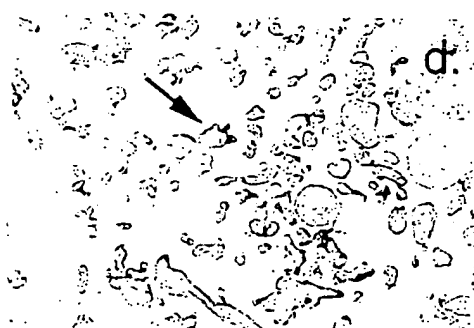
Bladder: 1G8



Colon: 1G8



Kidney: 3E6



Placenta: 3E6

B.

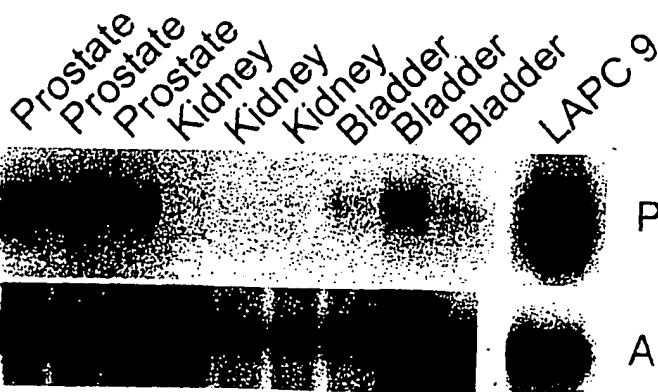
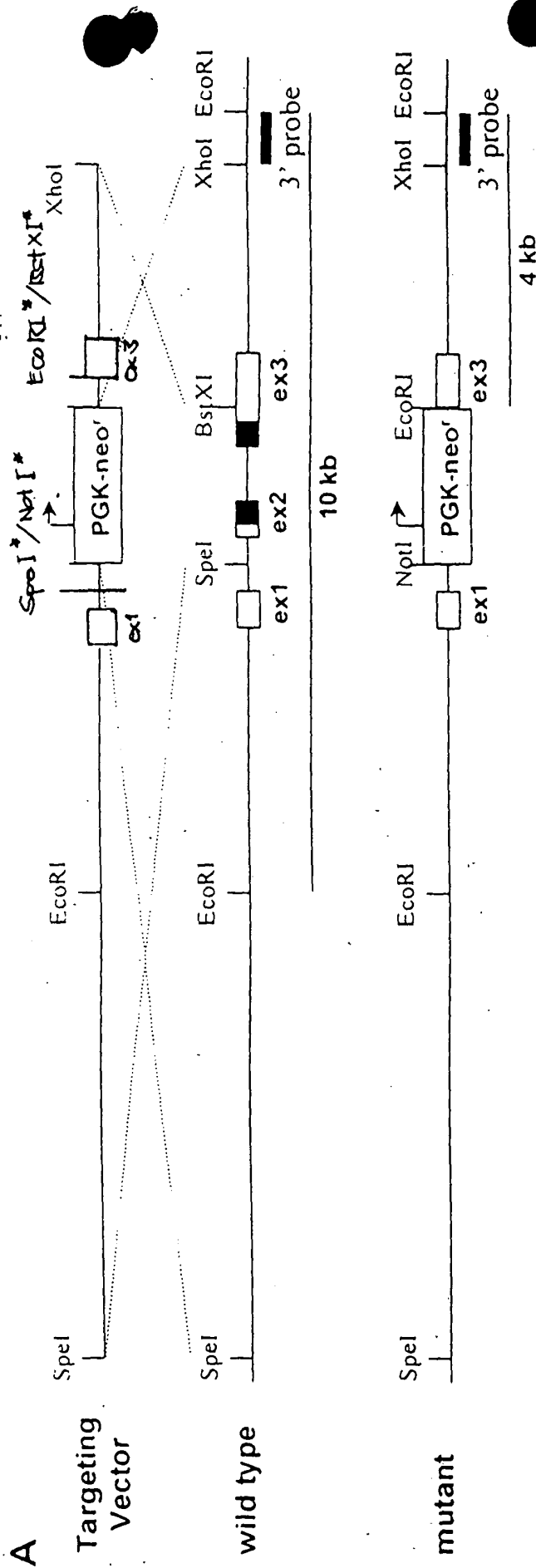


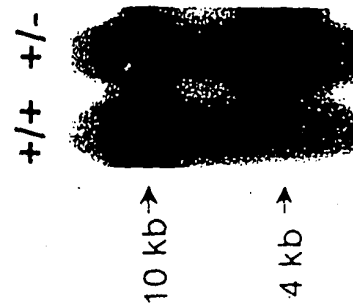
FIGURE 39

# Targeting of Mouse PSCA Gene

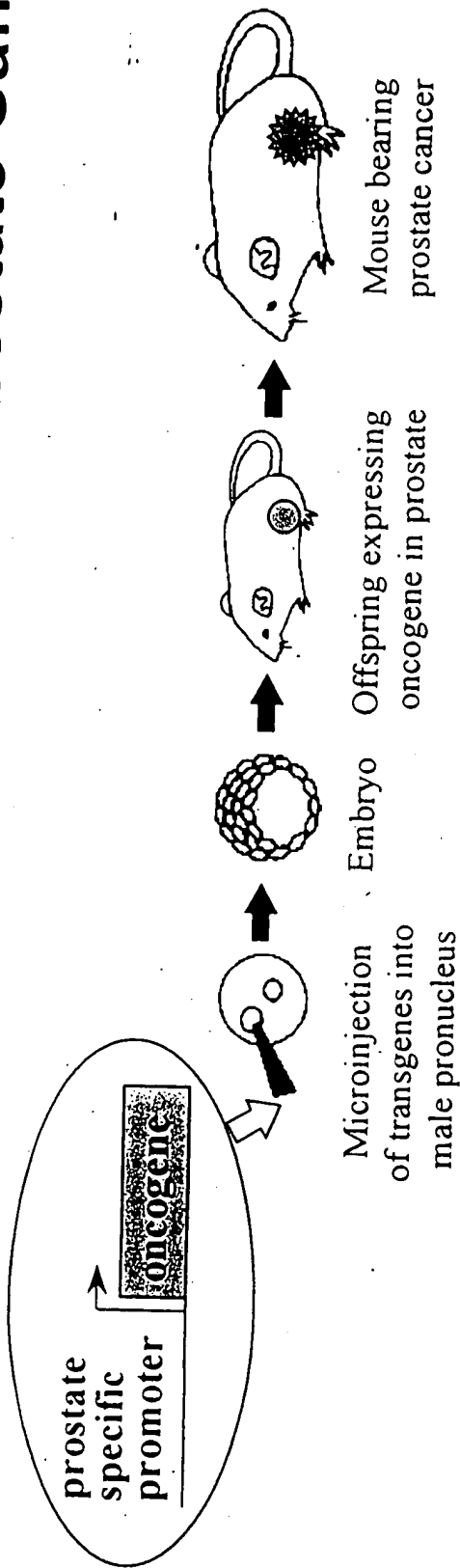


## B. Genomic Southern Analysis of ES Cells

- \* ex1, 2, and 3 are the exons of PSCA gene.
- \* Black boxes of ex2 and ex3 encode PSCA mature protein sequences.
- \* ES genomic DNAs were digested with EcoRI, followed by Southern hybridization using 3' probe.



# Transgenic Mouse Models of Prostate Cancer



Transgene	Target tissues	Characteristics
C3(1) (-3 kb)/ SV40 large+small, T <i>Maroulakou et al.</i> 1994 <i>PNAS</i>	prostate (secretory cells) urethral, mammary and sweat gland	Low-grade PIN 8-12 wks High-grade PIN 8-12 wks Invasive carcinoma 28 wks No metastases
Probasin (-426 bp)/ SV40 large+small, T <i>Greenberg et al.</i> 1995 <i>PNAS</i>	prostate (secretory cells)	Low-grade PIN 5-8 wks High-grade PIN 8-12 wks Invasive carcinoma 12 wks Metastases in lymph node, lung, liver and bone
Cryptdin2 (-6.5 kb)/ SV40 large+small, T <i>Garabedian et al.</i> 1998 <i>PNAS</i>	prostate (neuroendocrine cells) small intestine	Low-grade PIN 8-12 wks High-grade PIN 8-12 wks Invasive carcinoma 16 wks Metastases in lymph node, lung, liver and bone

# Reporter Gene Constructs for Transfection Assay

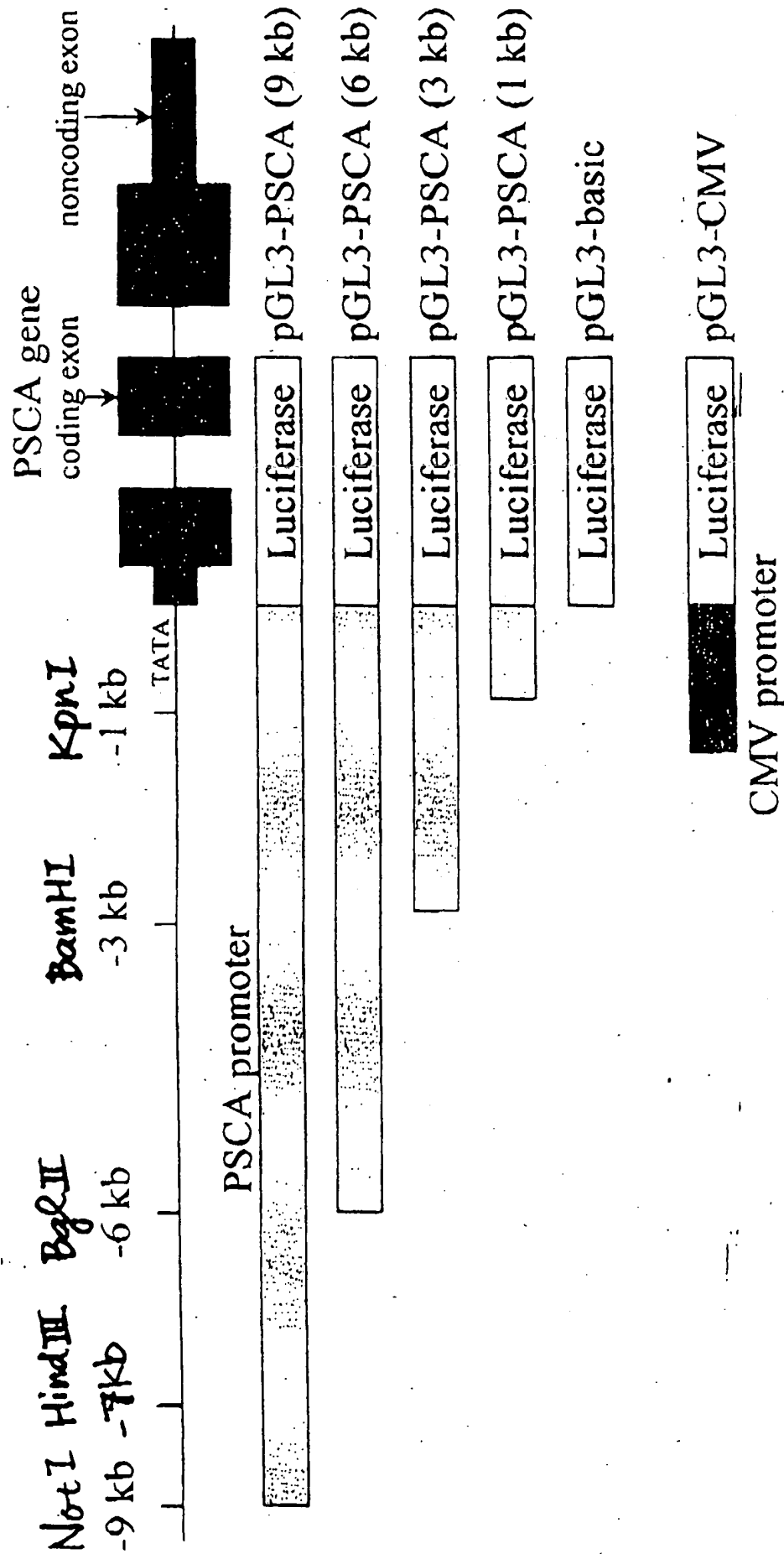


FIGURE 42



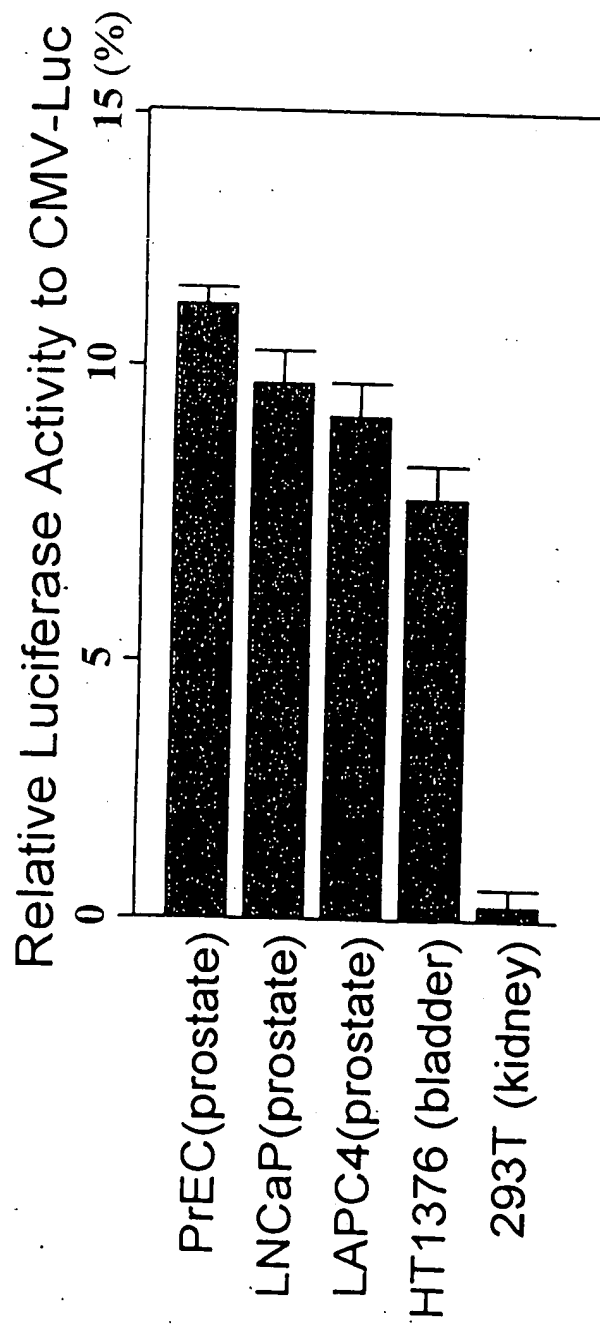


FIGURE 43

# Identification of Prostate-Specific Elements Within PSCA Promoter Sequences

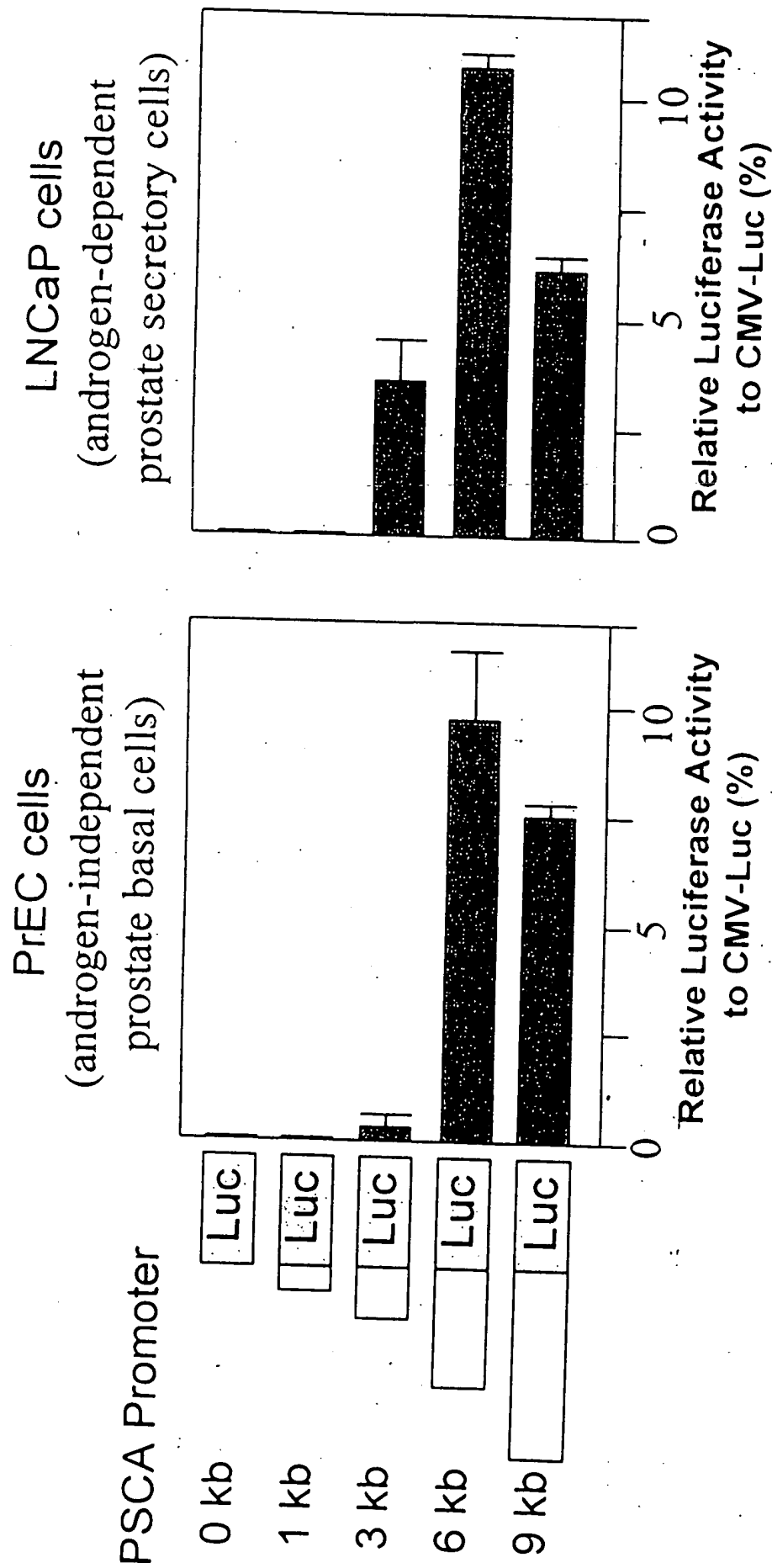


FIGURE 44

# Update of Transgenic Mouse Projects

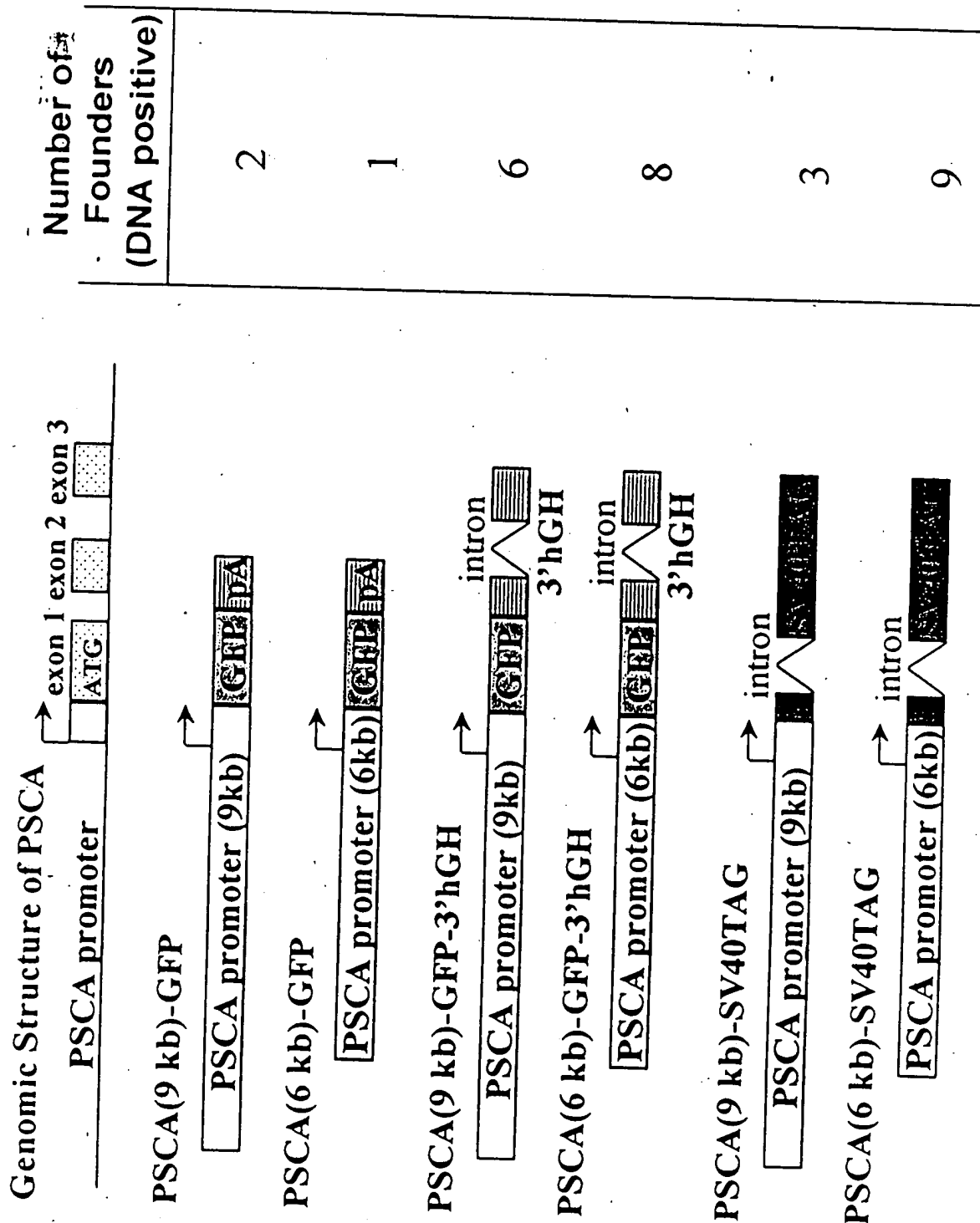


FIGURE 45



**HUMAN**  
Spleen  
Thymus  
Prostate  
Testis  
Ovary  
S. int.  
Colon  
PBL

**HUMAN**  
Spleen  
Thymus  
Prostate  
Testis  
Ovary  
S. int.  
Colon  
PBL

Prostate Test

Prostate Test

Tests

0  
Ovary  
stis

2. S. int.

Colon DBL

Colon DBL

Heart

art  
Brain

Placenta

Lung

Liver

Muscle

**Kidney**

Key

hPSCA<sup>↑</sup>

# Northern Analysis

# MOUSE

Ant. prostate  
Dorsol/at. prostate  
Bladder prostate  
Urethral vesicle  
Seminal vesicle  
Testis  
Kidn

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

prostate

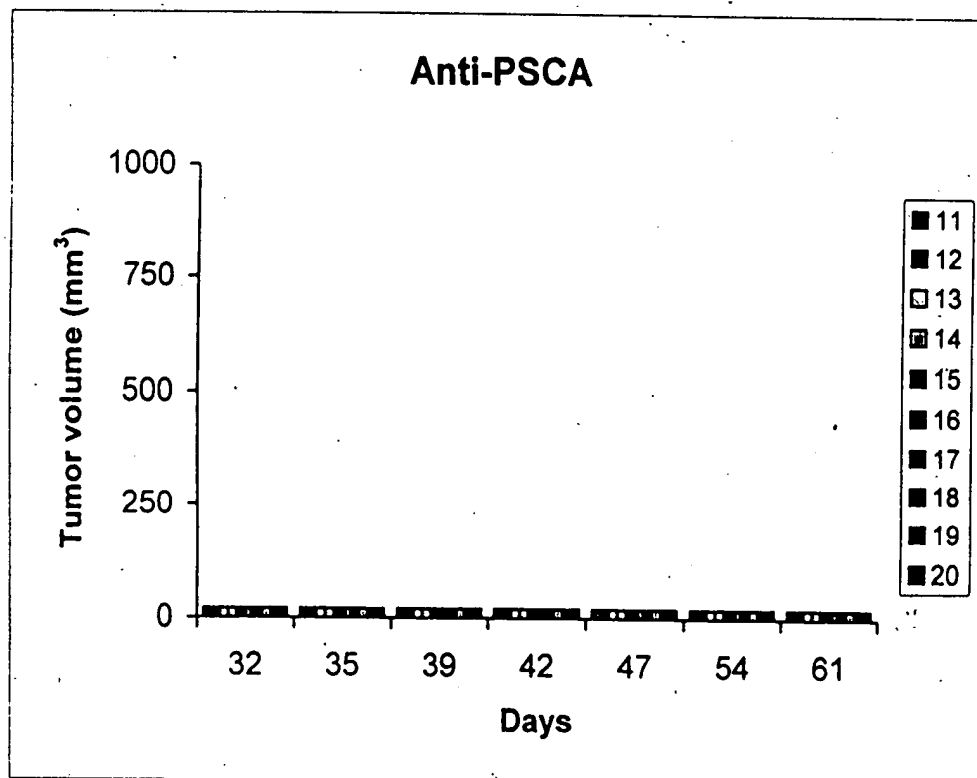
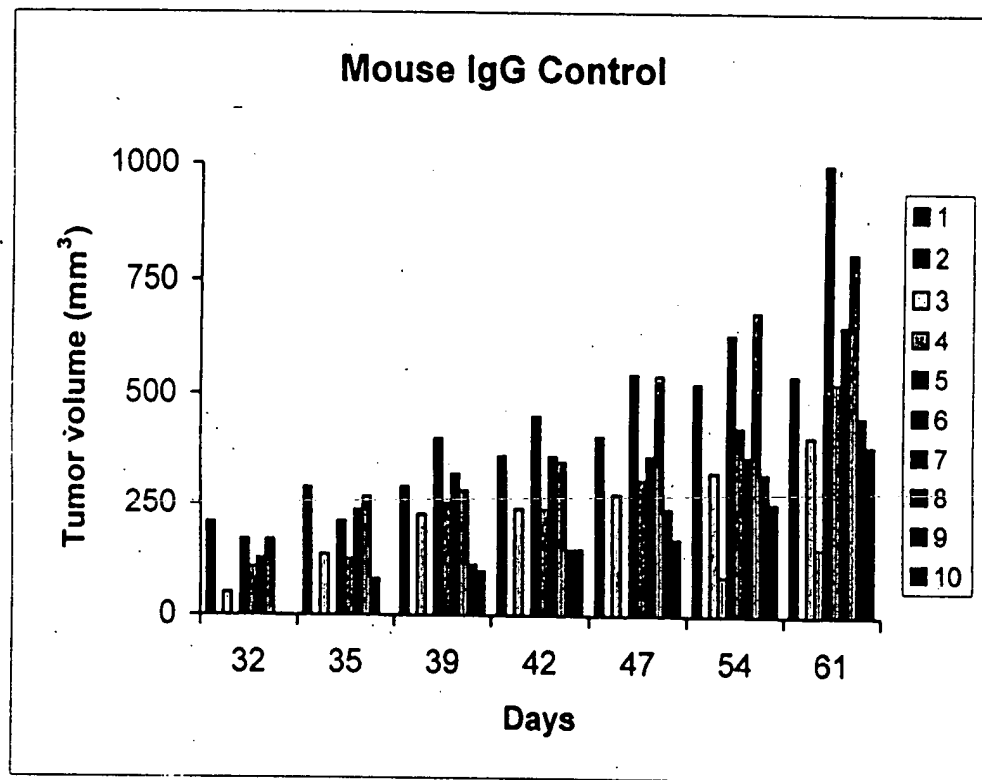
prostate

mPSCA $\rightarrow$

mG3PDH  $\uparrow$

## RT-PCR

FIGURE 47

[illegible]

**A**

**FIG. 49**

Epitope recognized (OD 450 nm)

<u>mAb</u>	<u>Isotype</u>	<u>F (18-98)</u>	<u>N (2-50)</u>	<u>M (46-109)</u>	<u>C (85-123)</u>
1G8	IgG1 k	1.485	0.004	1.273	0.003
2A2	IgG2a k	0.973	0.631	0.023	0.010
2H9	IgG1 k	1.069	1.026	0.002	0.001
3C5	IgG2a k	1.916	1.709	0.006	0.002
3E6	IgG3 k	1.609	0.036	1.133	2.118
3G3	IgG2a k	2.805	1.731	0.004	0.000
4A10	IgG2a k	1.053	0.493	0.000	0.001

**B**

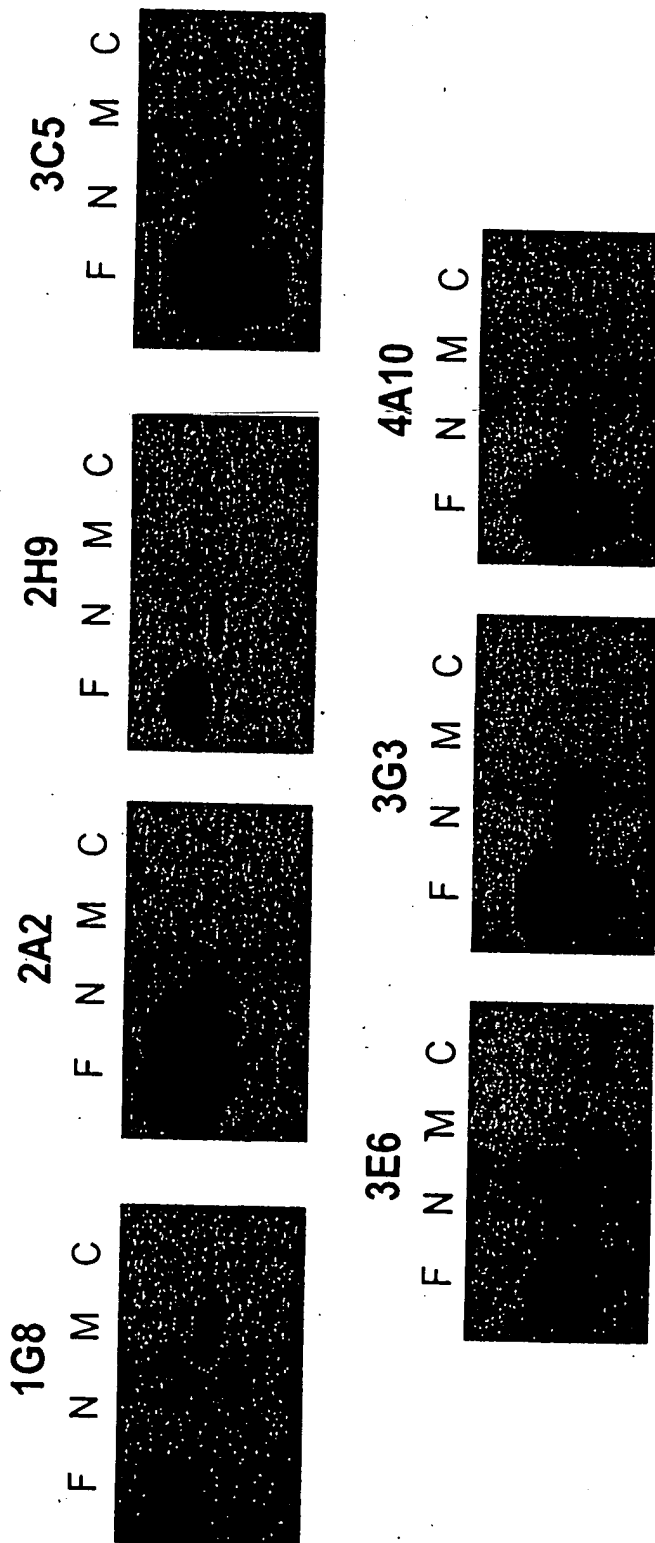
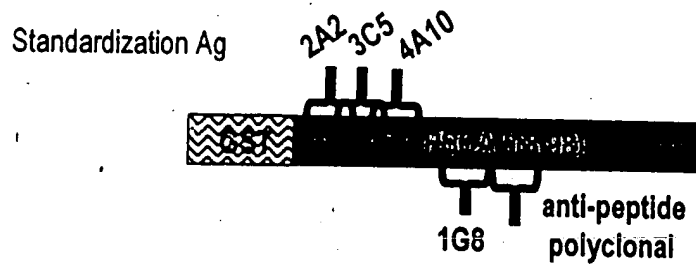
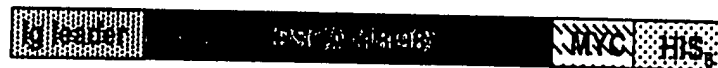


FIG. 50

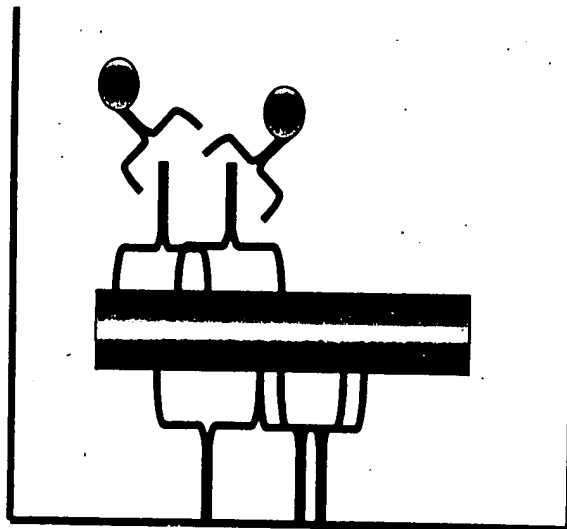
A



Engineered mammalian secreted form



B



Anti-IgG2a HRP

Anti-PSCA mAbs 3C5+4A10+2A2 (IgG2a)

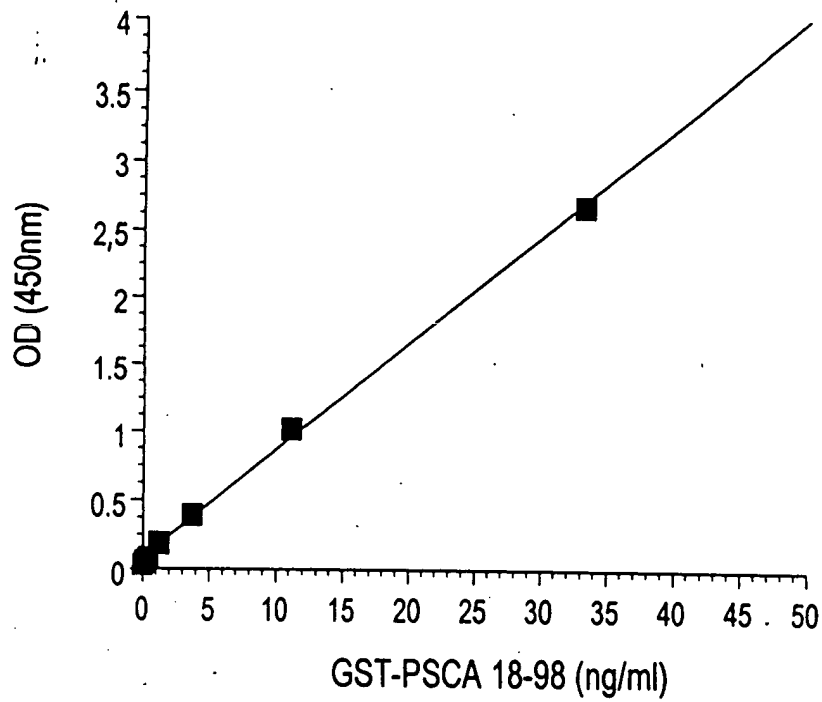
PSCA

Affinity purified anti-peptide polyclonal  
+ mAb 1G8 (IgG1)



FIG. 51

A



B

<u>Sample</u>	<u>OD+range (n=2)</u>	<u>ng/ml</u>
vector	0.005+0.001	ND
vector+hu serum	0.004+0.001	ND
secPSCA	2.695+0.031	32.92
secPSCA+hu serum	2.187+0.029	26.55

FIG. 52

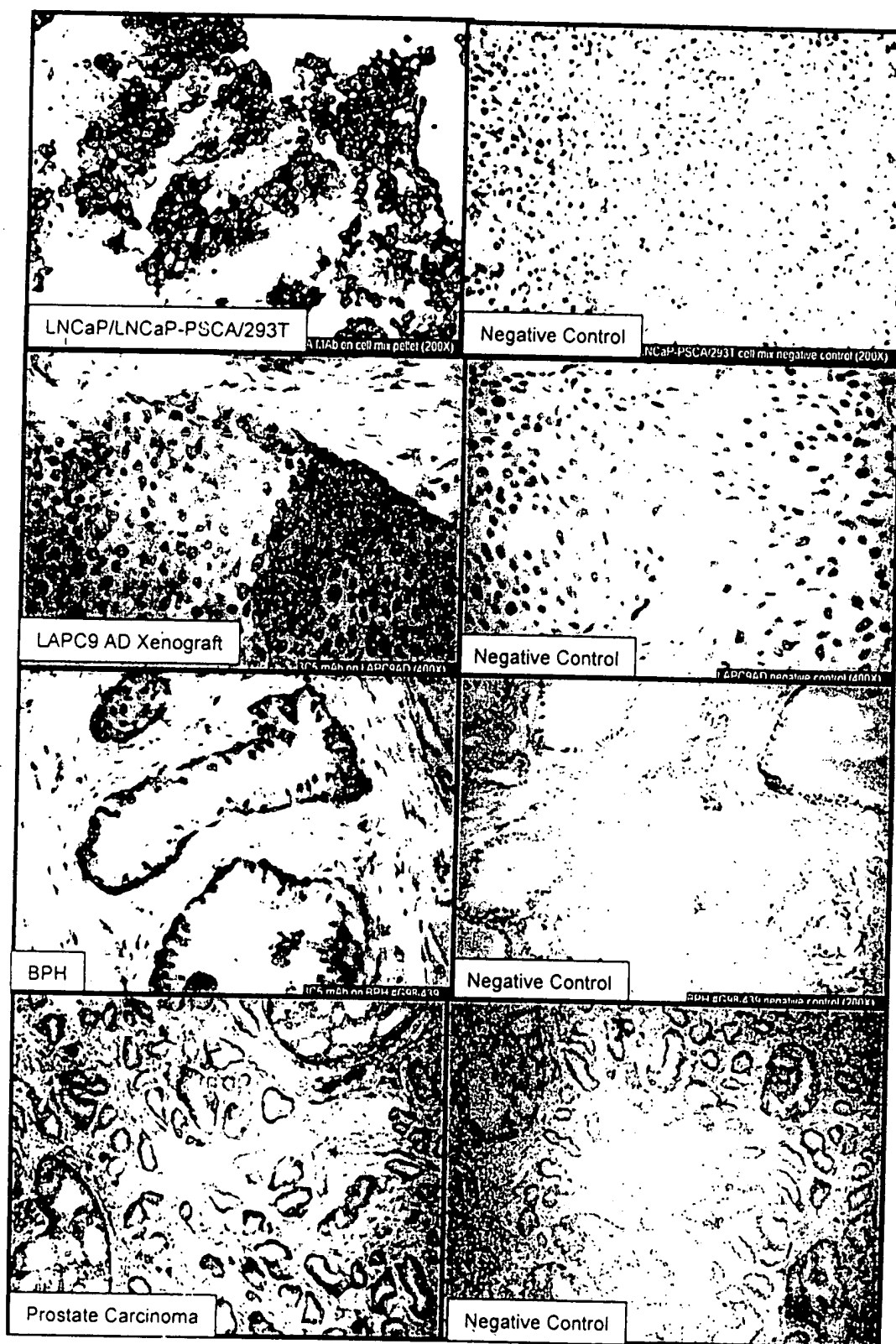
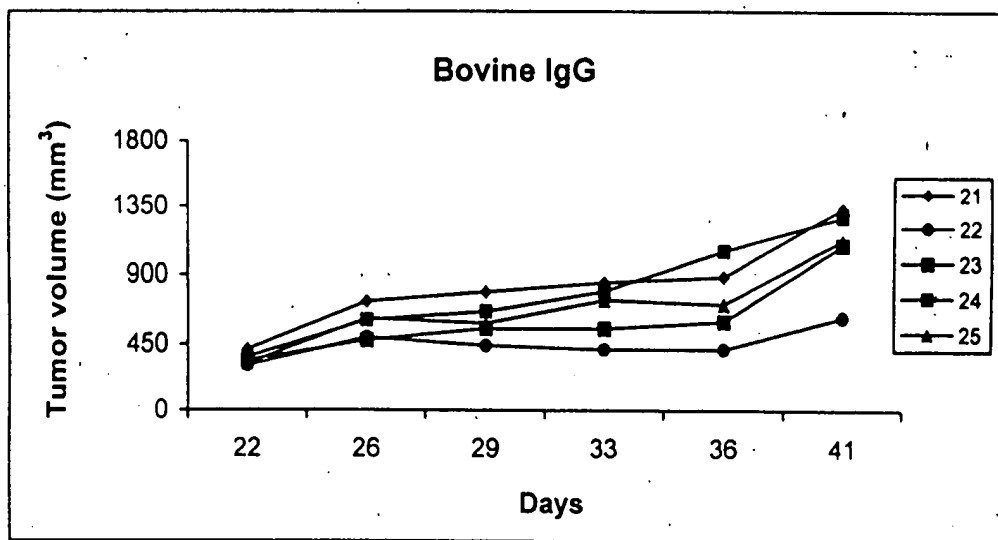
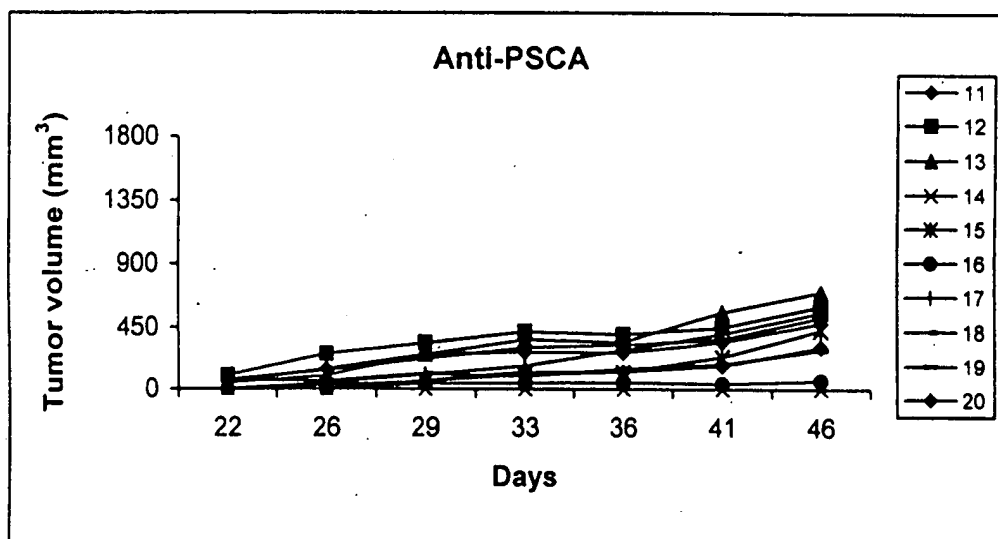
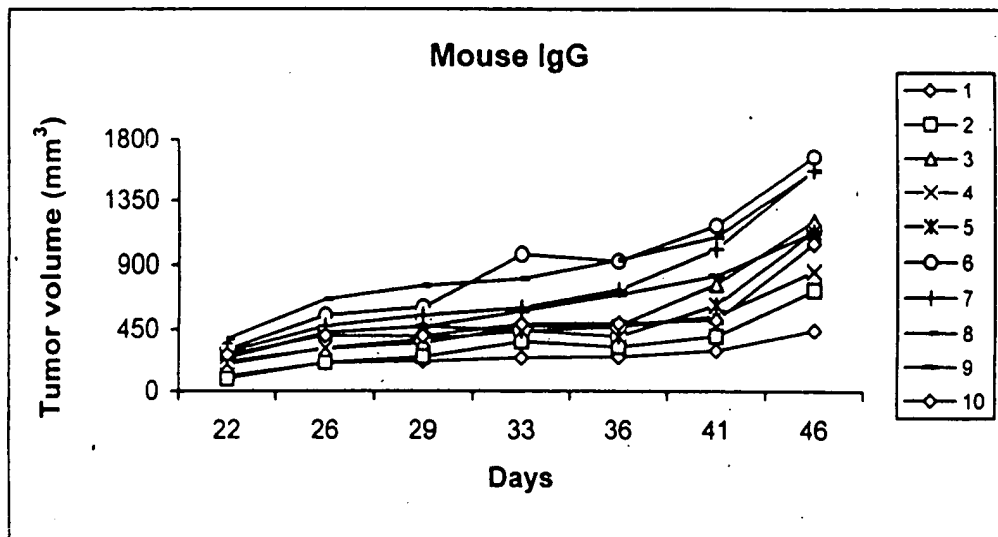


FIG. 53



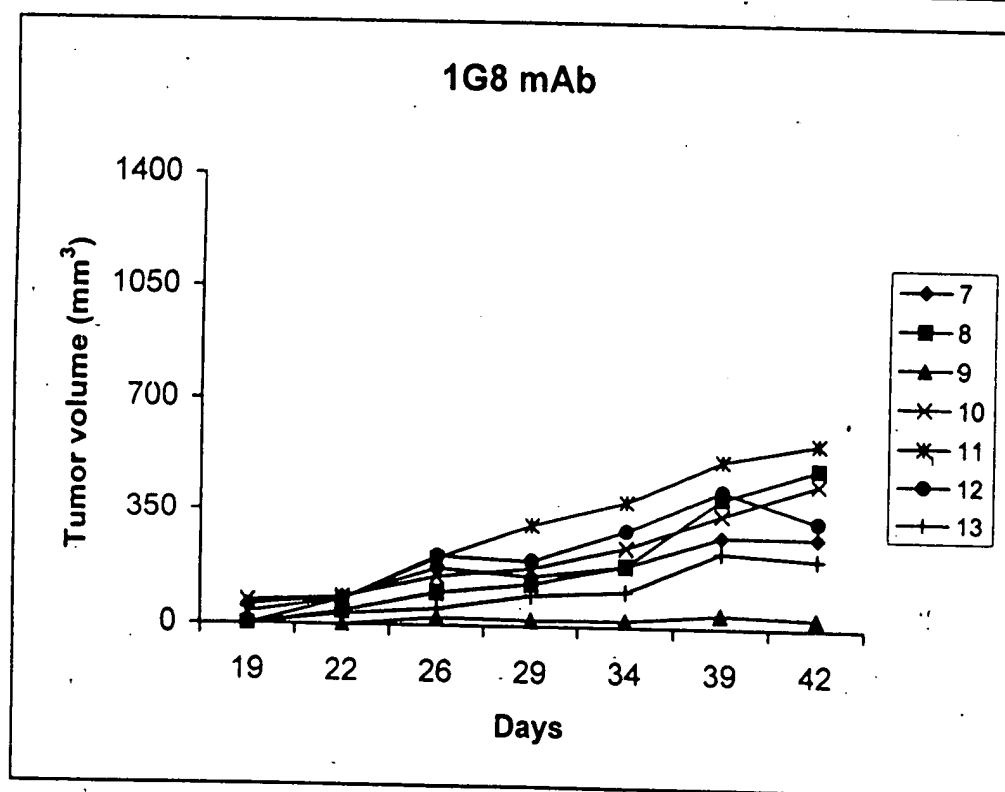
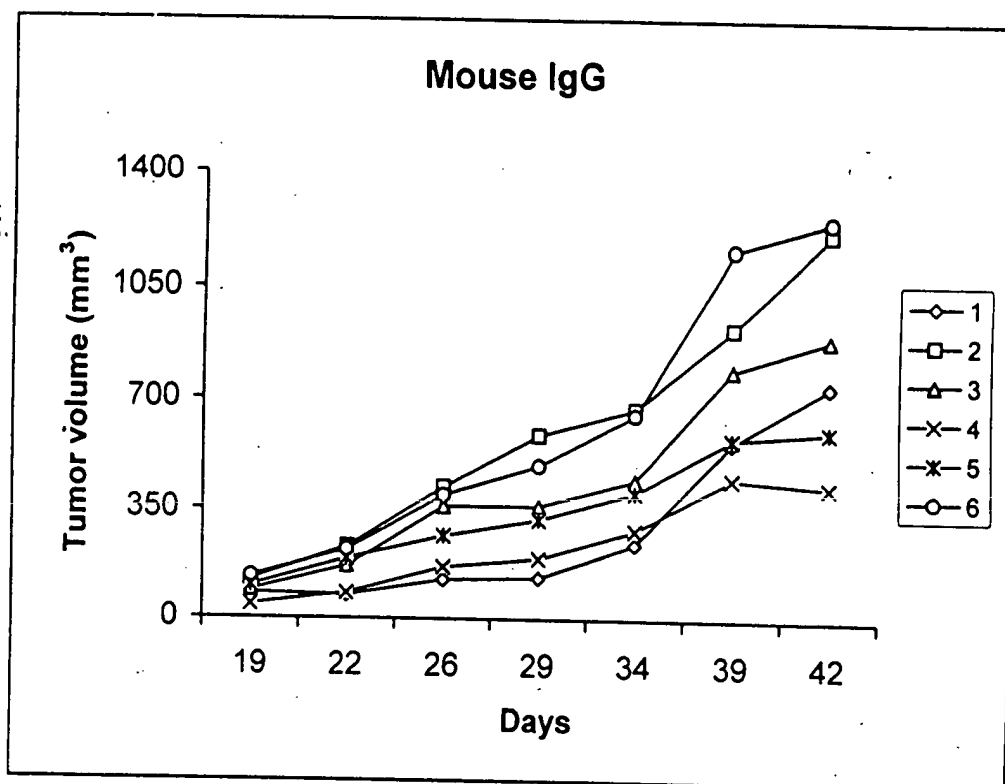


FIG. 55

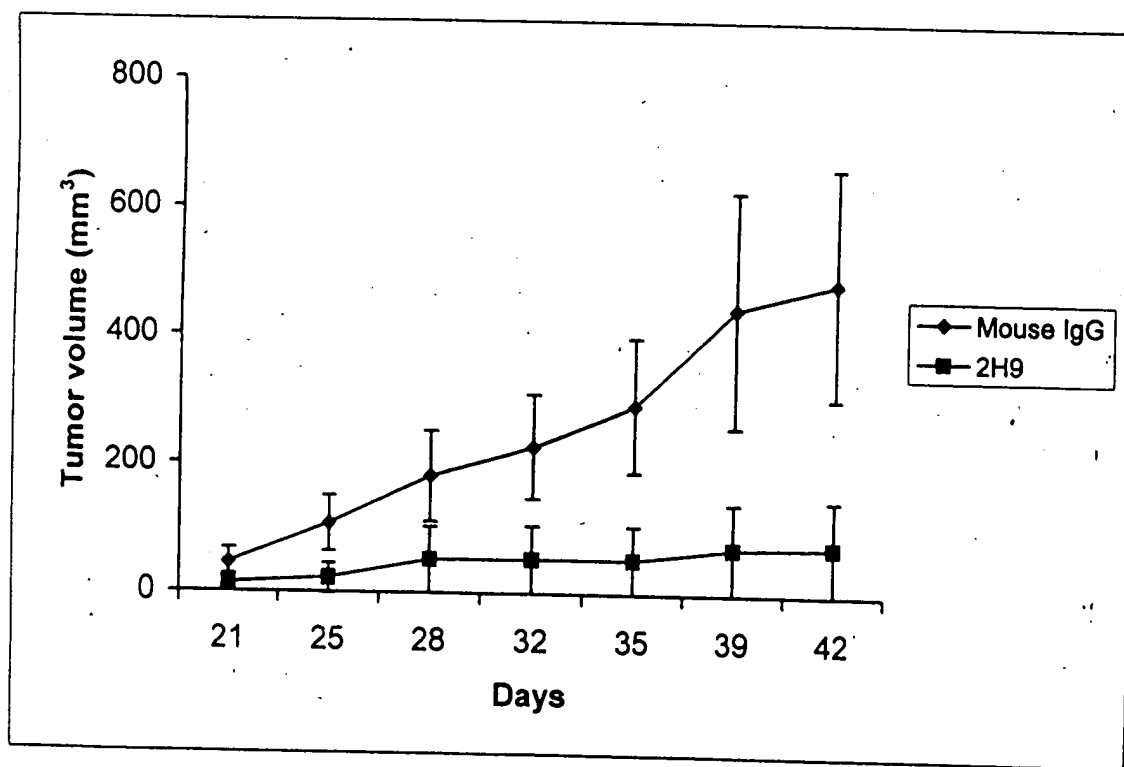
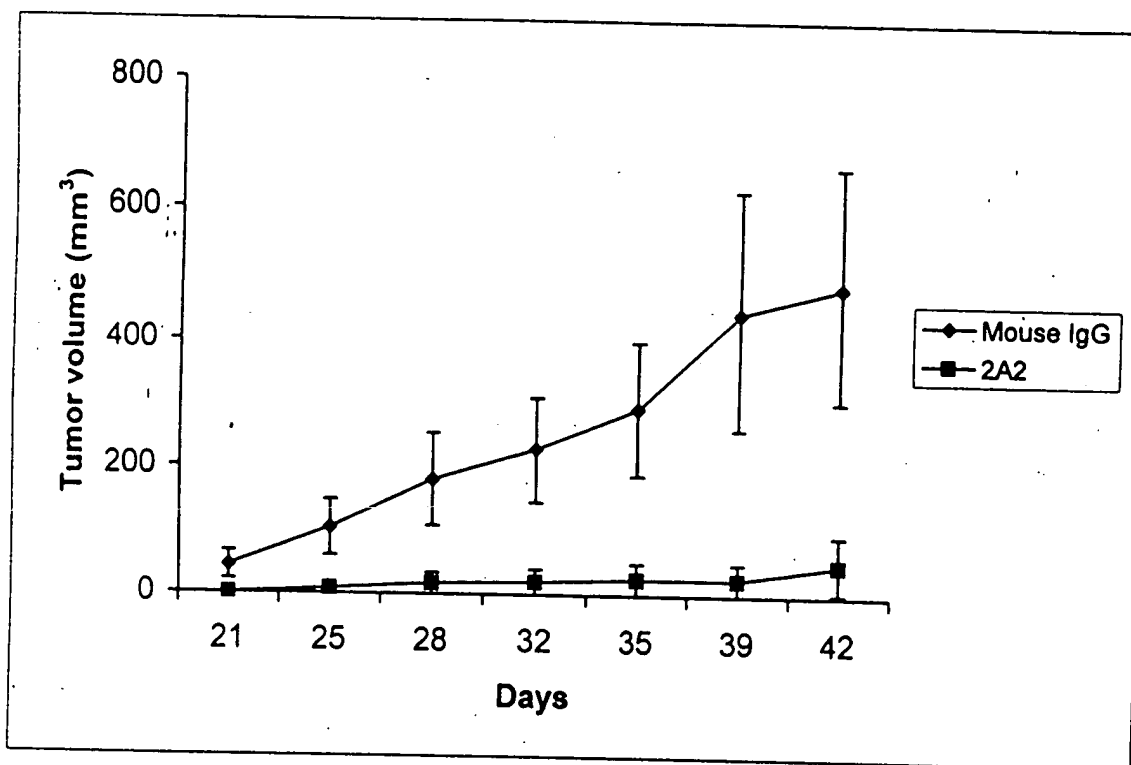


FIG. 56

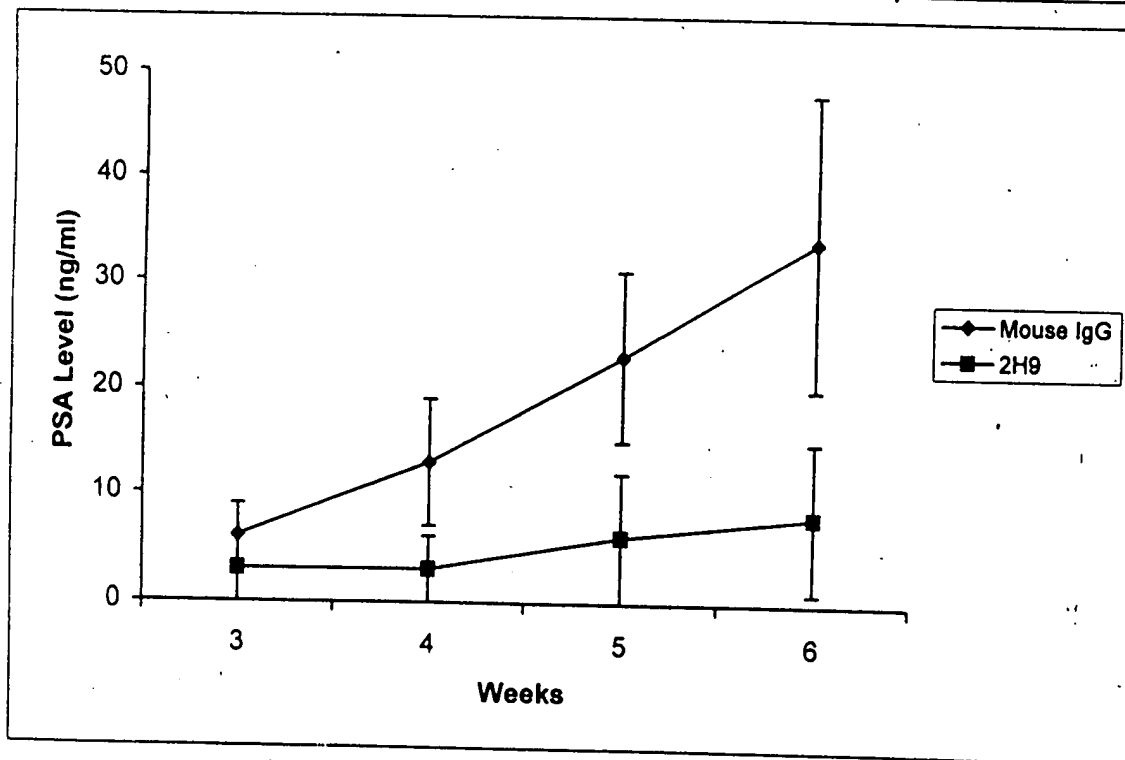
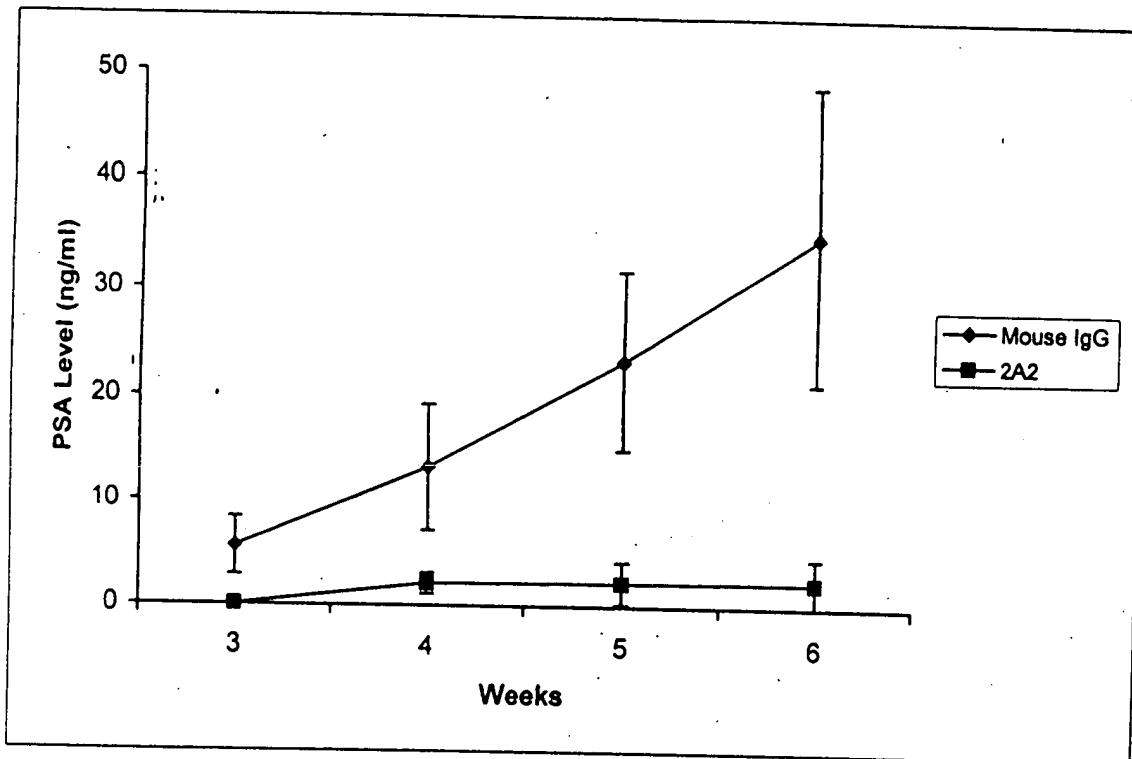
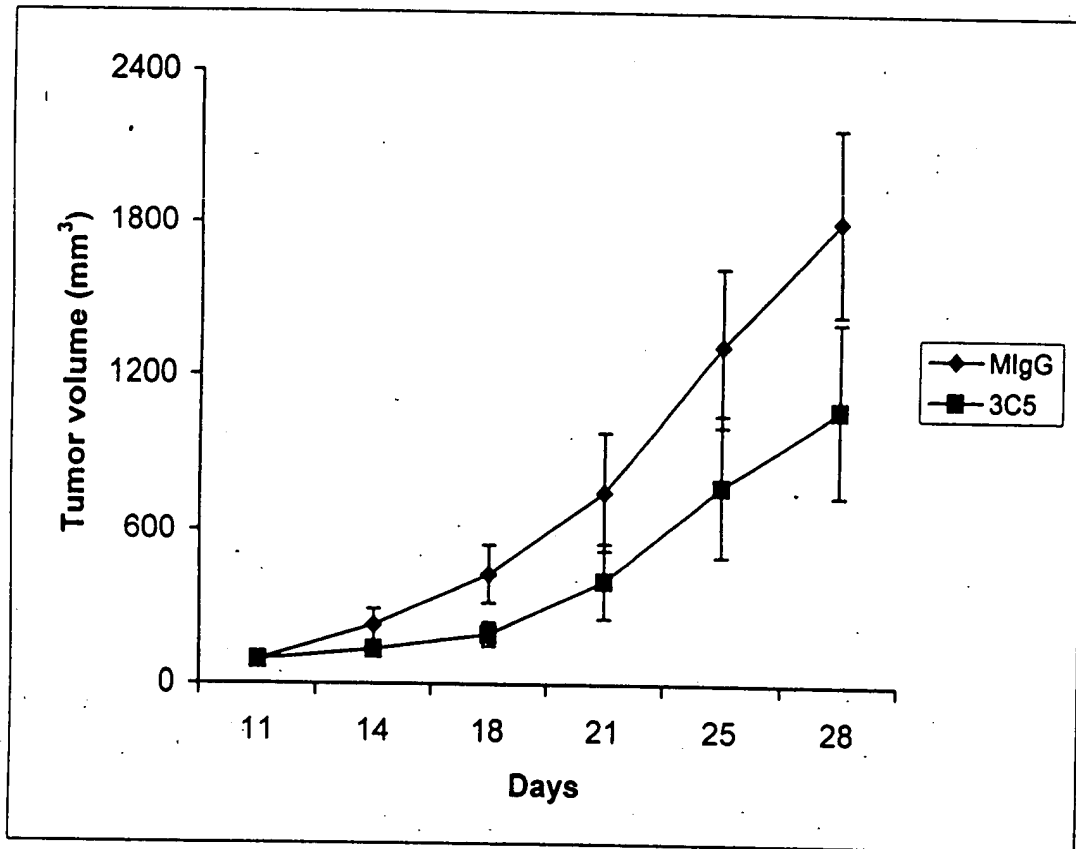



FIG. 57





GGGGCAGAACTTGTGAGGTCAGGGGCCTCAGTCAAGTTGTCCTGCACAGCTTCTGGCTTC 120  
G A E L V R S G A S V K L S C T A S G F 40


  
 ATTGGATGGATTGATCCTGAGAATGGTGACACTGAATTTGTCCCGAAGTTCCAGGGCAAG 240

I G W I D P E N G D T E F V P K F O G K 80

GCCACTATGACTGCAGACATTTTCTCCAACACAGCCTACCTGCACCTCAGCAGCCTGACA 300  
A T M T A D I F S N T A Y L H L S S L T 100

TCTGAAGACACTGCCGTCTATTACTGTAAACGGGGGGTTTCTGGGGCCAAGGGACTCTG 360  
S E D T A V Y Y C K T G G F W G Q G T L 120

GTCAGTGTCTCTGCAGCCAAAACGACACCCCCATCTGTCTATCCACTG  
V T V S A A K T T P P S V Y P L

[illegible]



FIG. 59

TTGGTAGCAACAGCCTCAGATGTCCACTCCCAGGTCCAAGTGCAGCAACCTGGGTCTGAA 60  
L V A T A S D V H S Q V Q L Q Q P G S E 20

CTGGTGAGGCCTGGAAGTTCAGTGAAGCTGTCCTGCAAGGCTTCTGGCTATACATTCTCC 120  
L V R P G T S V K L S C K A S G Y T F S 40  
CDR1

AGCTACTGGATGCACTGGGTGAAGCAGAGGCCTGGACAAGGCCTTGAGTGGATTGGAAAT 180  
S Y W M H W V K Q R P G Q G L E W I G N 60

ATTGACCCTGGTAGTGGTTACACTAACTACGCTGAGAACCTCAAGACCAAGGCCACACTG 240  
I D P G S G Y T N Y A E N L K T K A T L 80  
CDR2

ACTGTAGACACATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGAC 300  
T V D T S S S T A Y M Q L S S L T S E D 100

TCTGCAGTCTATTACTGTACAAGCCGATCTACTATGATTACGACGGGATTGCTTACTGG 360  
S A V Y Y C T S R S T M I T T G F A Y W 120  
CDR3

GGCCAAGGGACTCTGGTCACTGTCTCTGCAGCTACAACAACAGCCCCATCTGTCTATCCA 420  
G Q G T L V T V S A A T T T A P S V Y P 160

CTGGCC  
L A

FIG. 60

AATGACTTCGGGTTGAGCTGGGTTTTTATTATTGTTCTTTTAAAGGGGTCCGGAGTGAA 60  
N D F G L S W V F I I V L L K G V R S E 20

GTGAGGCTTGAGGAGTCTGGAGGAGGCTGGGTGCAACCTGGAGGATCCATGAAACTCTCC 120  
V R L E E S G G G W V Q P G G S M K L S 40

TGTGTAGCCTCTGGATTTACTTTTCAGTAATTACTGGATGACTTGGGTCCGCCAGTCTCCA 180  
C V A S G F T F S N Y W M T W V R Q S P 60  
CDR1

GAGAAGGGGCTTGAGTGGGTTGCTGAAATTCGATTGAGATCTGAAAATTATGCAACACAT 240  
E K G L E W V A E I R L R S E N Y A T H 80  
CDR2

TATGCGGAGTCTGTGAAAGGGAAATTCACCATCTCAAGAGATGATTCCAGAAGTCGTCTC 300  
Y A E S V K G K F T I S R D D S R S R L 100

TACCTGCAAATGAACAACTTAAGACCTGAAGACAGTGGGAATTTATTACTGTACAGATGGT 360  
Y L Q M N N L R P E D S G I Y Y C T D G 120

CTGGGACGACCTAACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCAGCCAAAACGACA 420  
L G R P N W G Q G T L V T V S A A K T T 140  
CDR3

CCCCATCTGTCTATCCACTGGCCCCTTGTA  
P P S V Y P L A P C V

Sequence

# FIG. 61

## CDR1 Comparisons

1G8	1gG <sub>1k</sub>	Middle	G	F	N	I	K	D	Y	Y	I	H
2H9	1gG <sub>1k</sub>	N-Term.	G	F	T	F	S	N	Y	W	M	T
4A10	1gG <sub>2ak</sub>	N-Term.	G	Y	T	F	S	S	Y	W	M	H

## CDR2 Comparisons

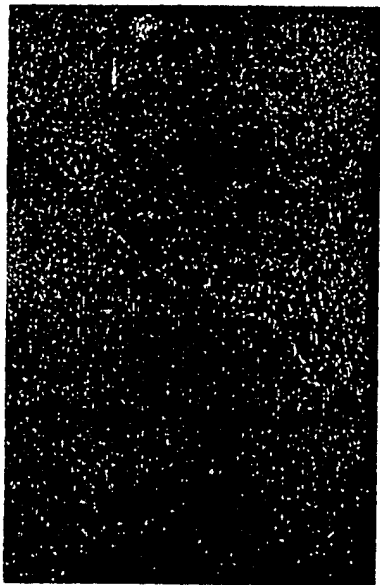
1G8	1gG <sub>1k</sub>	W	I	D	P	E	N	G	D	T	E	F	V	P	K	F	Q	G		
2H9	1gG <sub>1k</sub>	E	I	R	L	R	S	E	N	Y	A	T	H	Y	A	E	S	V	K	G
4A10	1gG <sub>2ak</sub>	N	I	D	P	G	S	G	Y	T	N	Y	A	E	N	L	K	T		

## CDR3 Comparisons

1G8	1gG <sub>1k</sub>	G	G	F														
2H9	1gG <sub>1k</sub>	L	G	R	P	N												
4A10	1gG <sub>2ak</sub>	R	S	T	M	I	T	T	G	F	A	Y						

FIG. 62

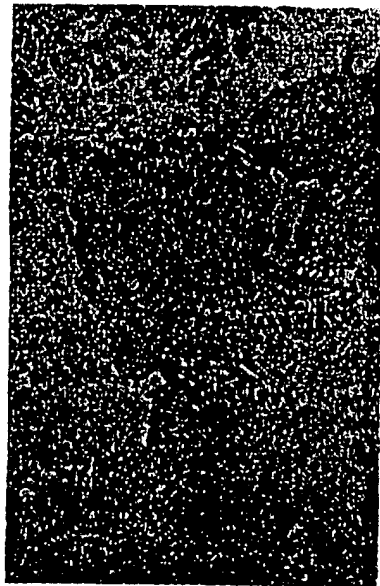
A



B



C



D

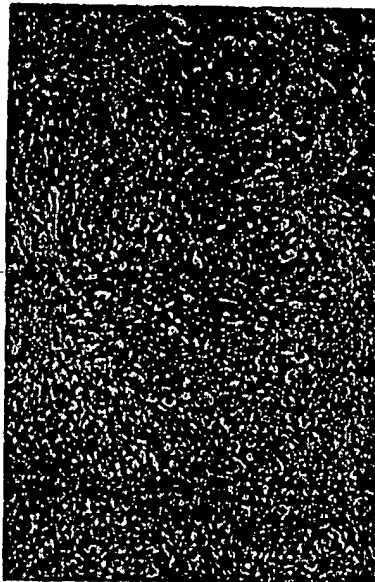


FIG. 63

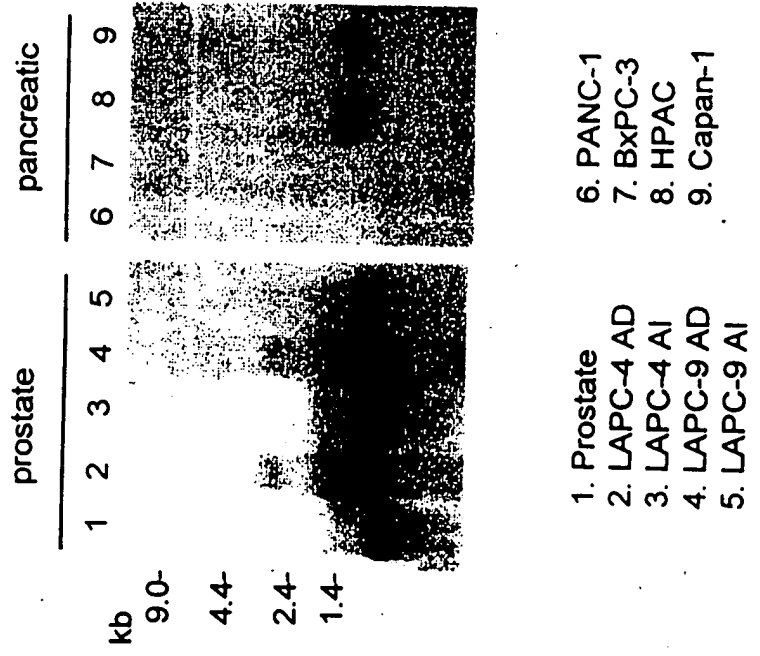
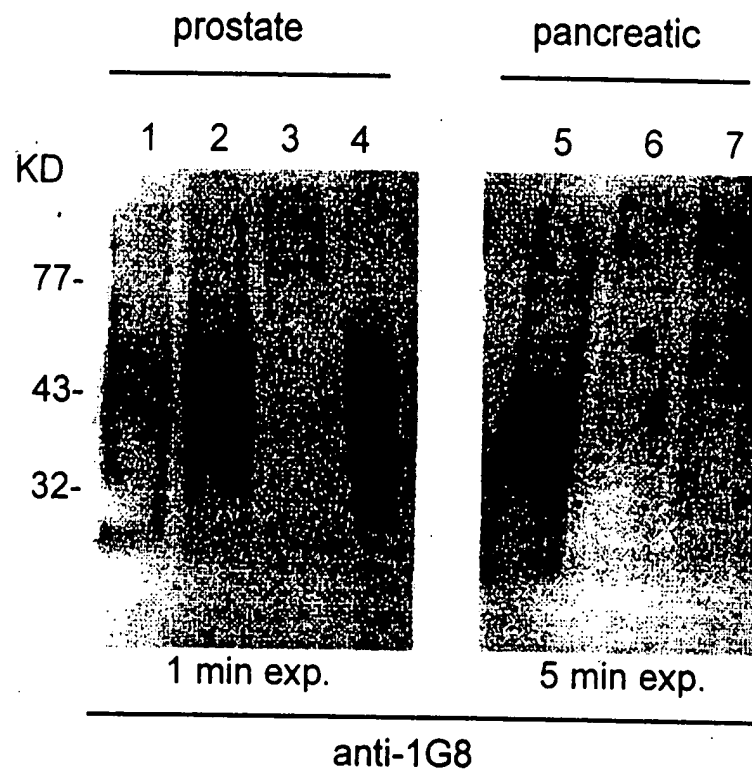


FIG. 64



1. LAPC-4 AD
2. LAPC-9 AI
3. LNCaP
4. LNCaP-PSCA

5. HPAC
6. Capan-1
7. ASPC-1

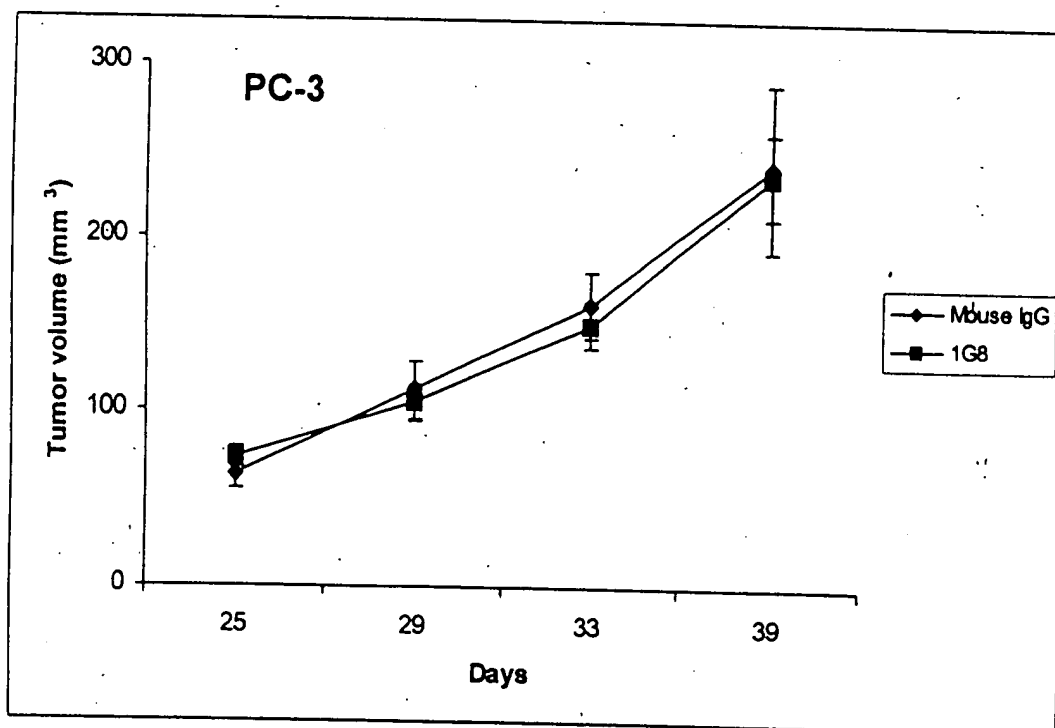
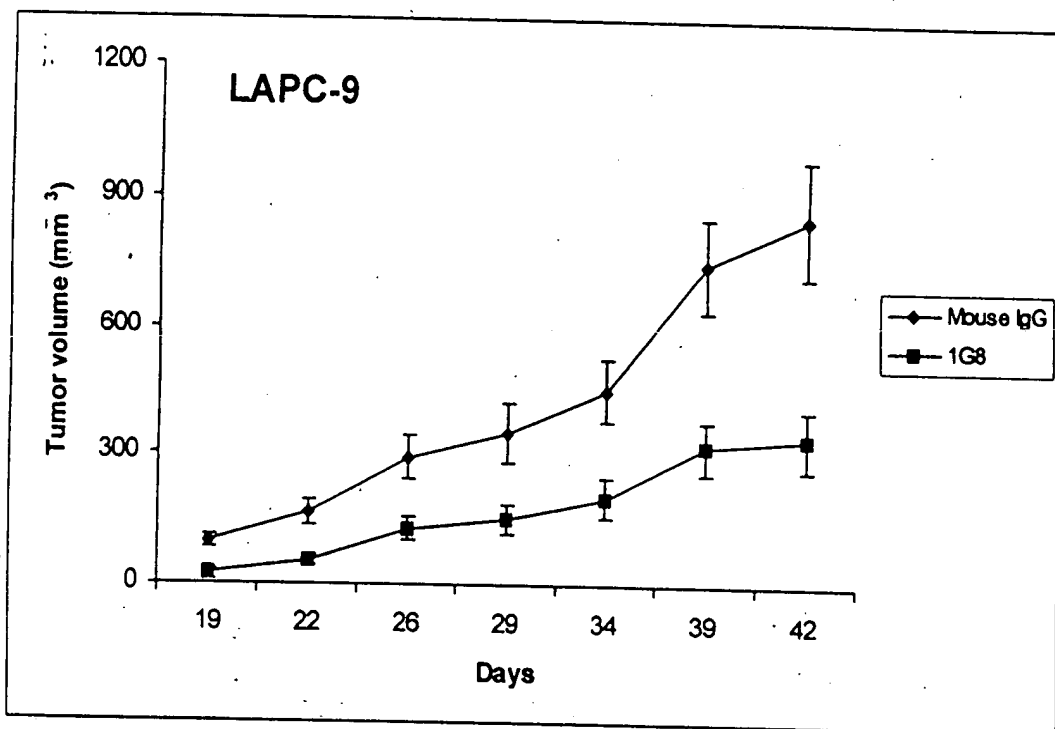
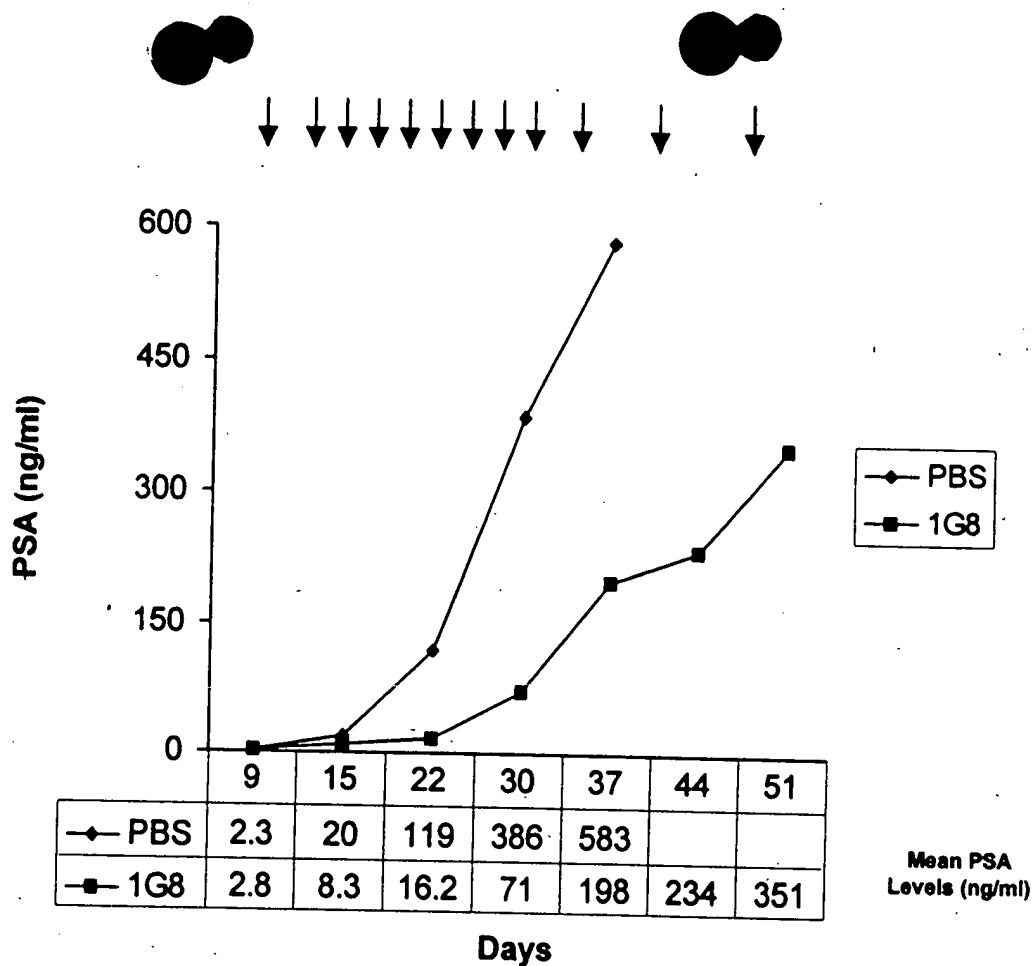


FIGURE 65

A)



B)

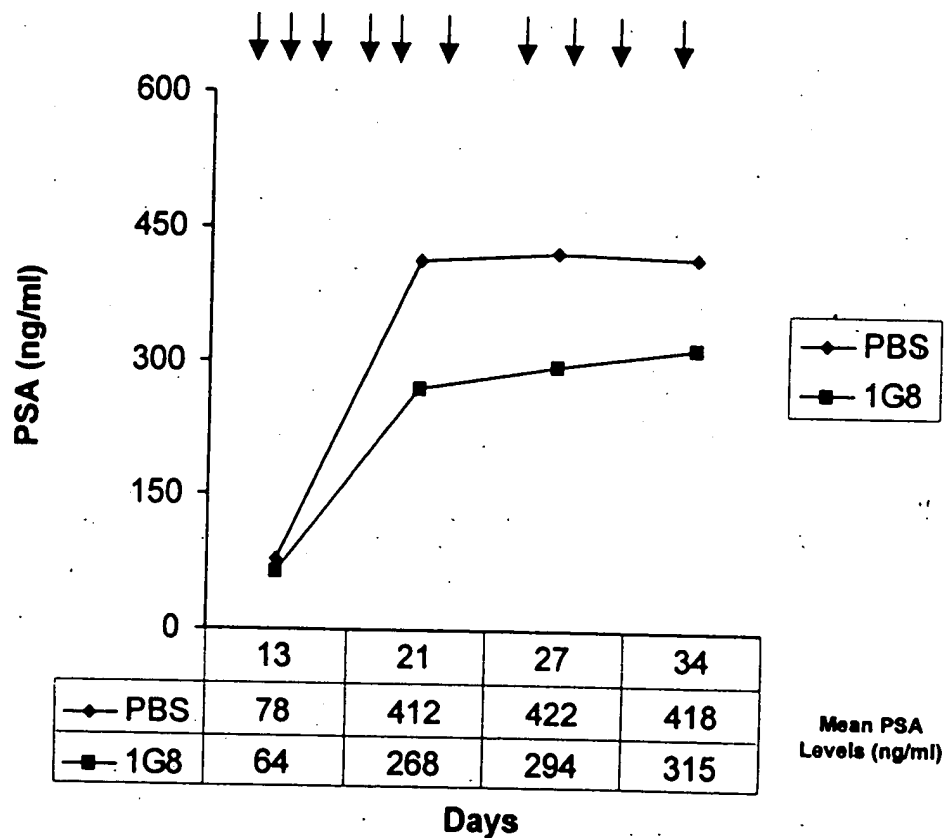
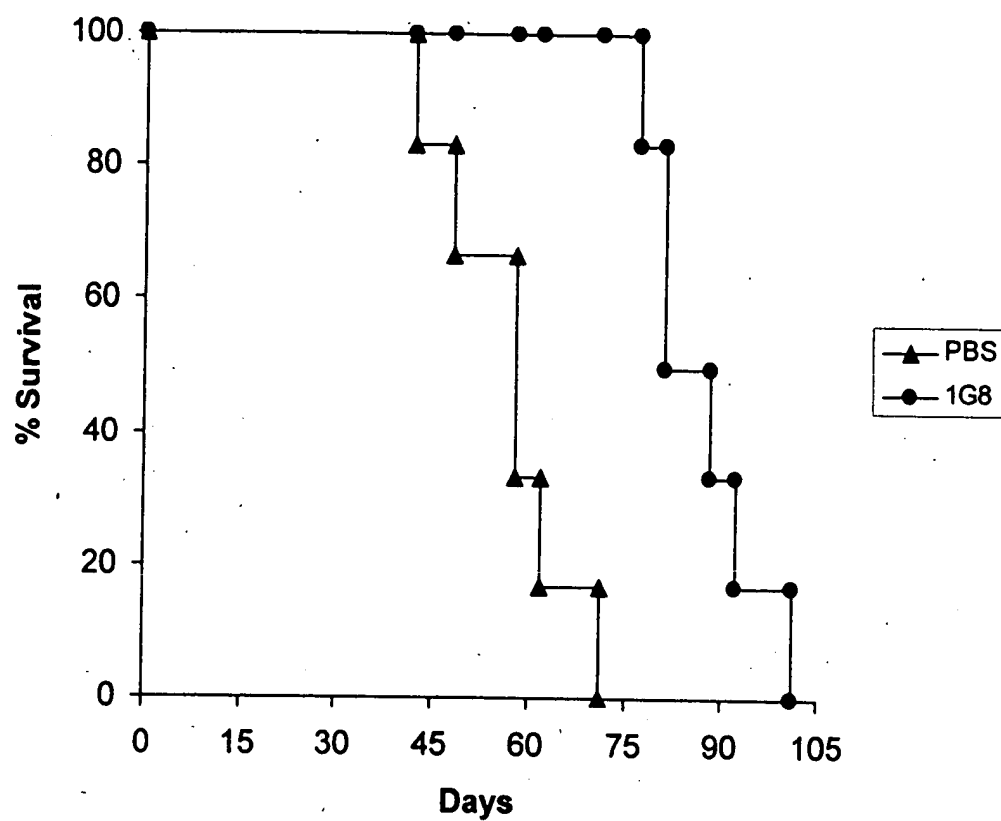


Figure 66



A)



B)

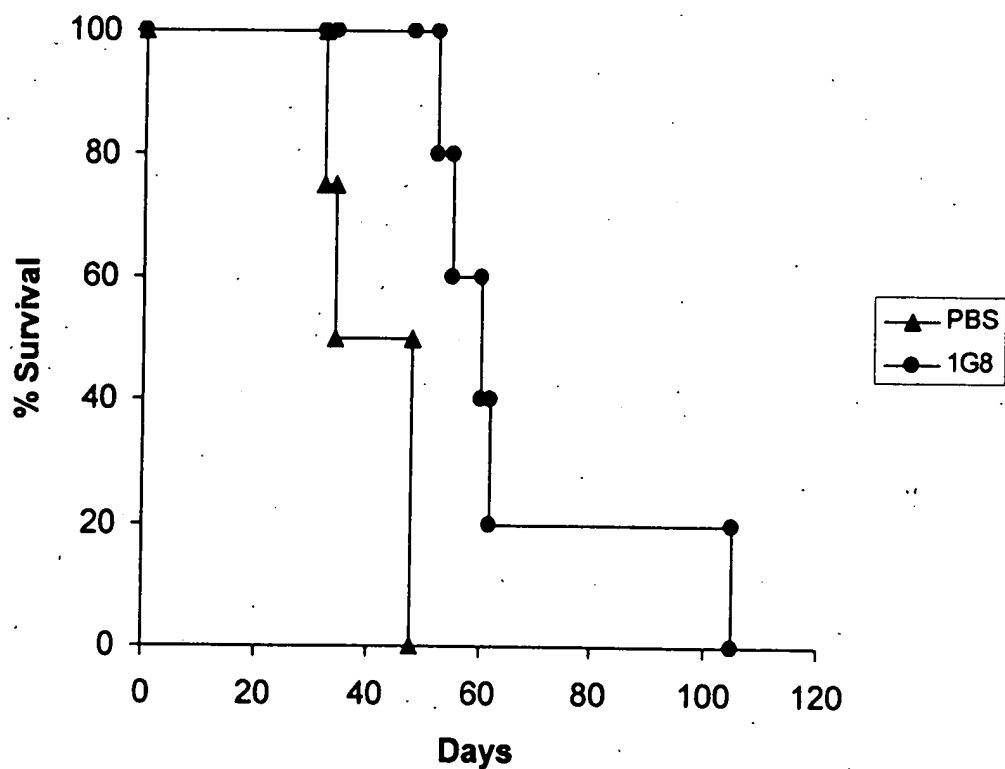
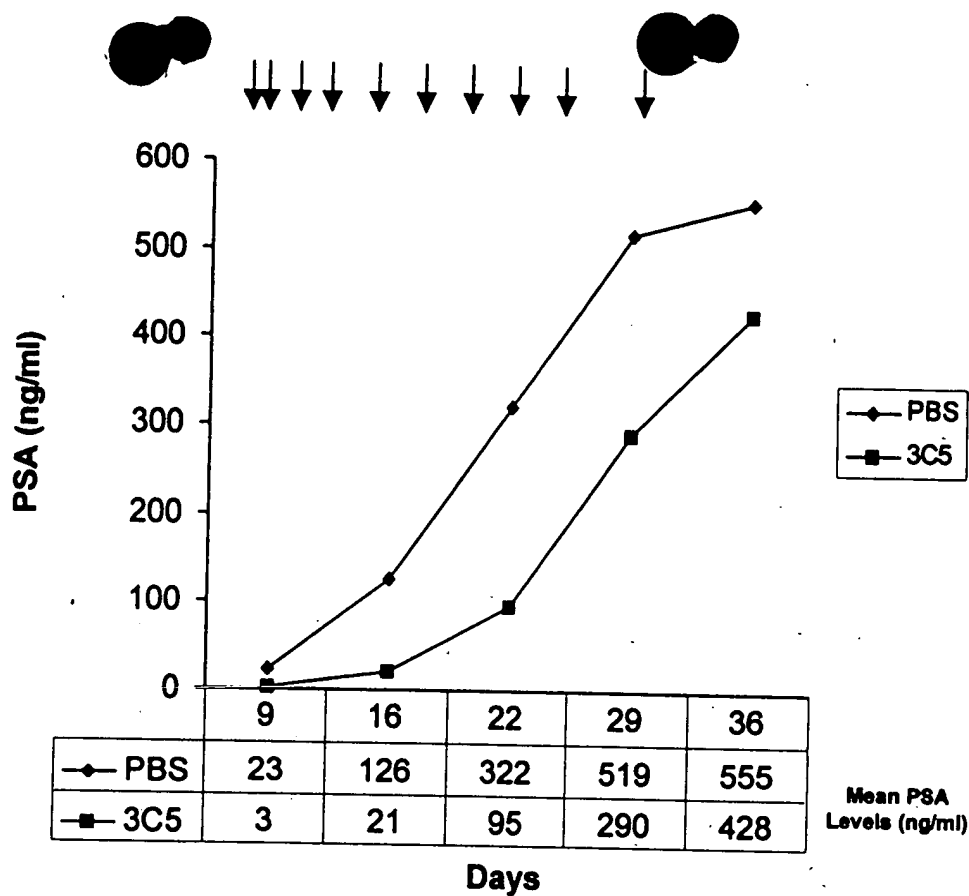


Figure 67

A)



B)

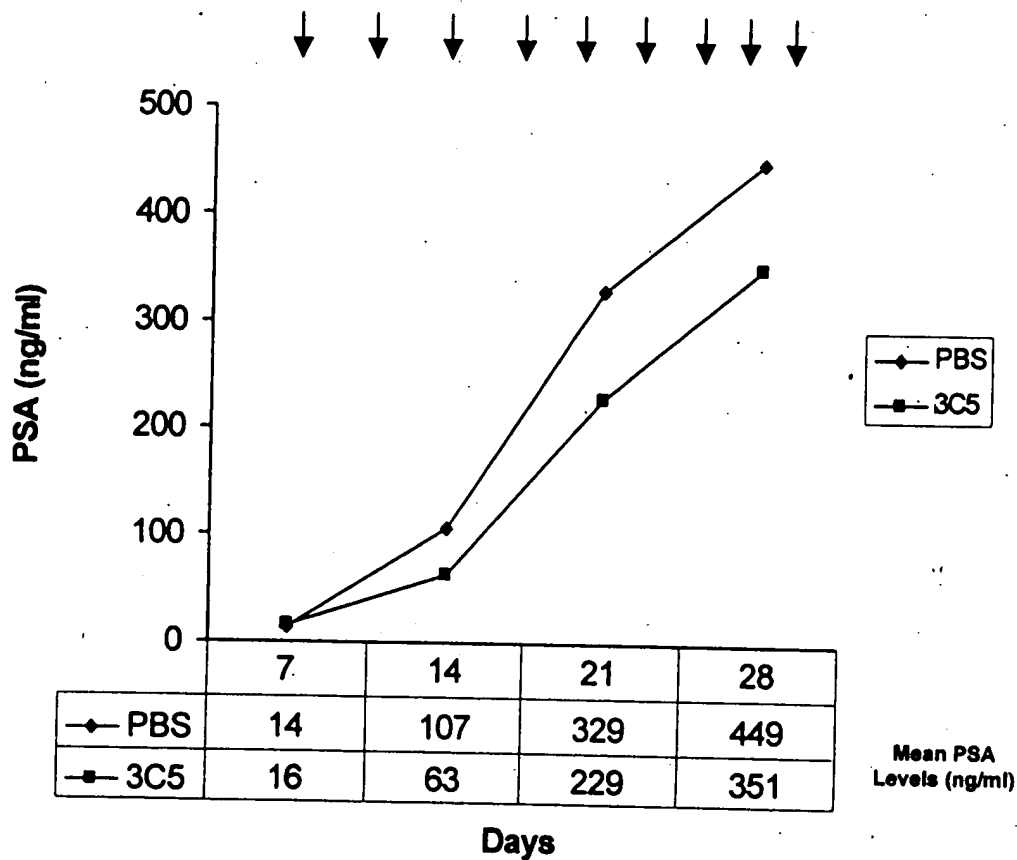
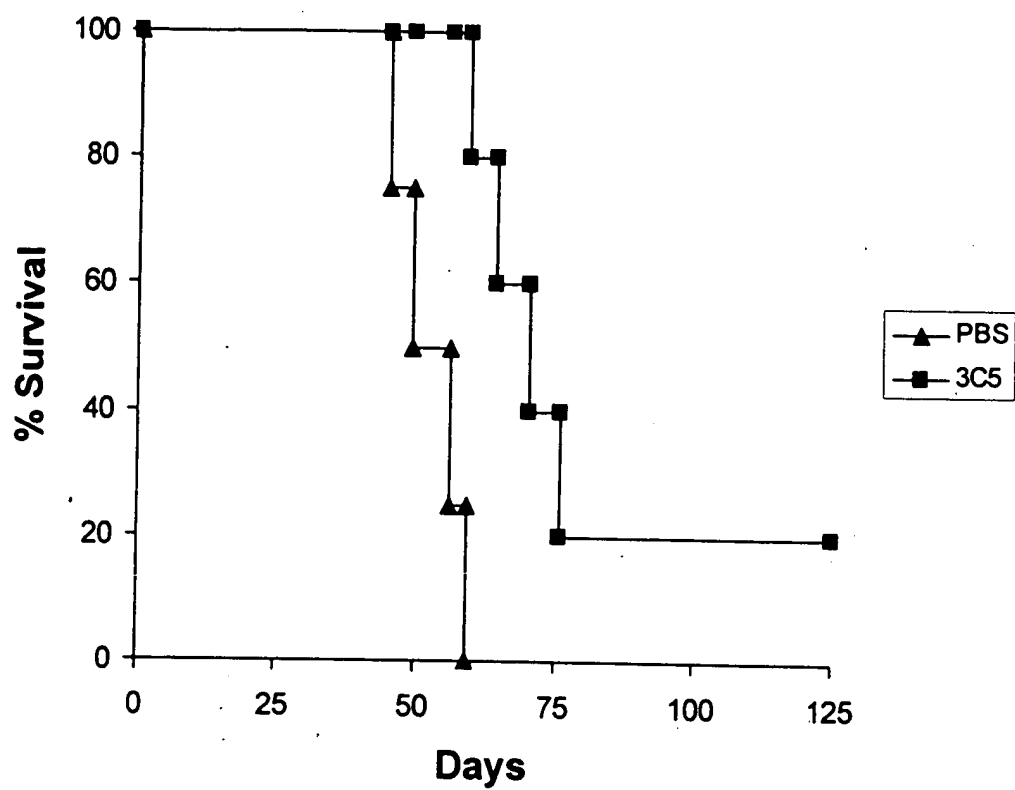


Figure 68

A)



B)

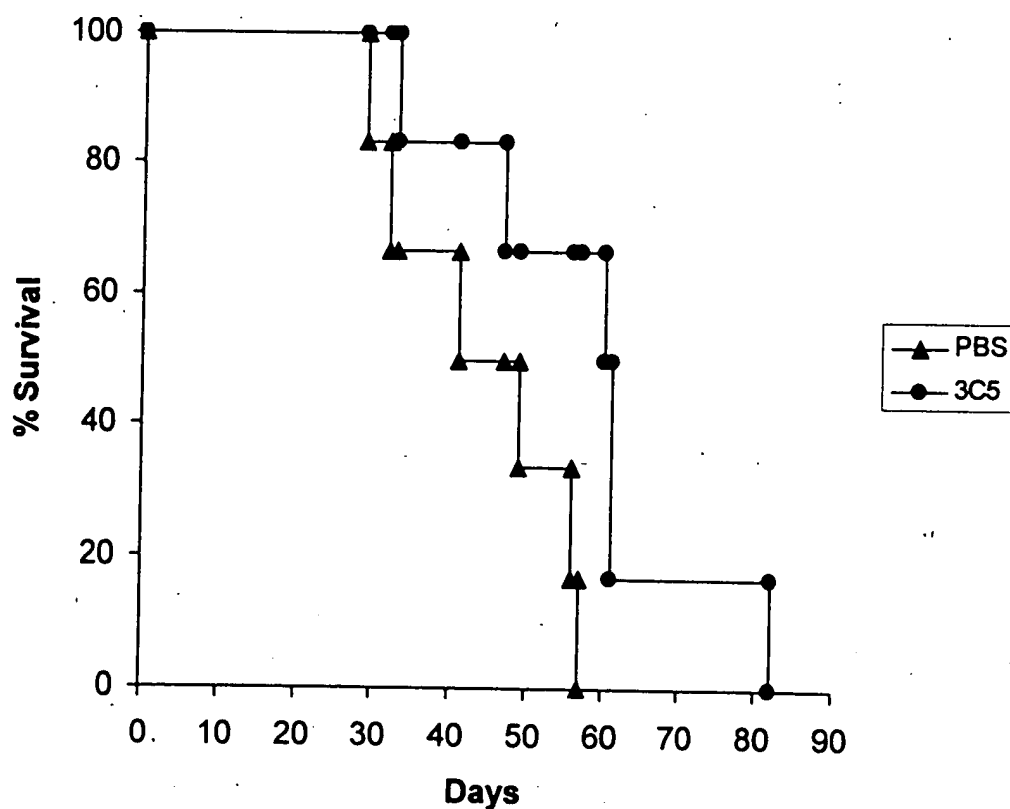


Figure 69

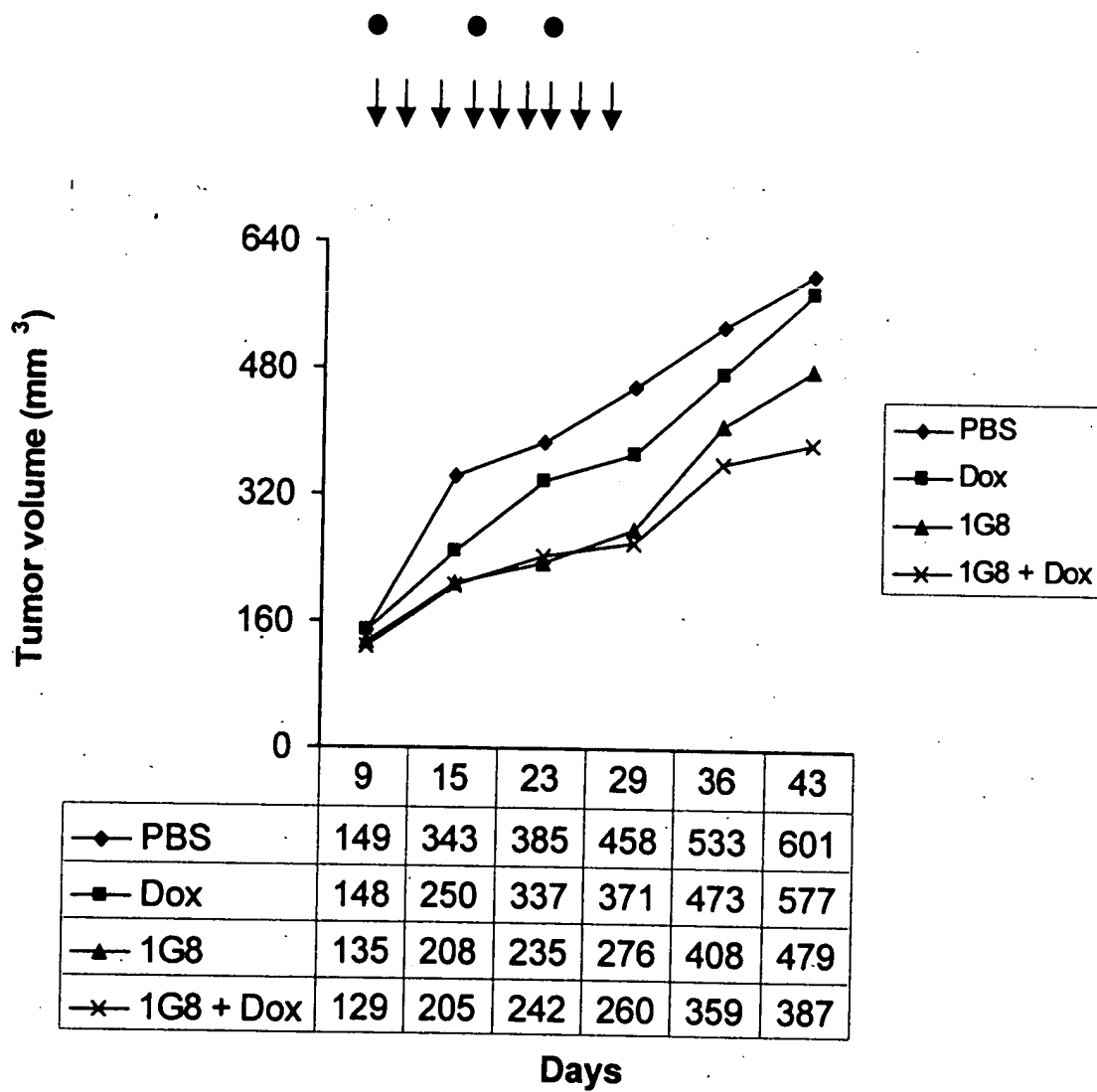
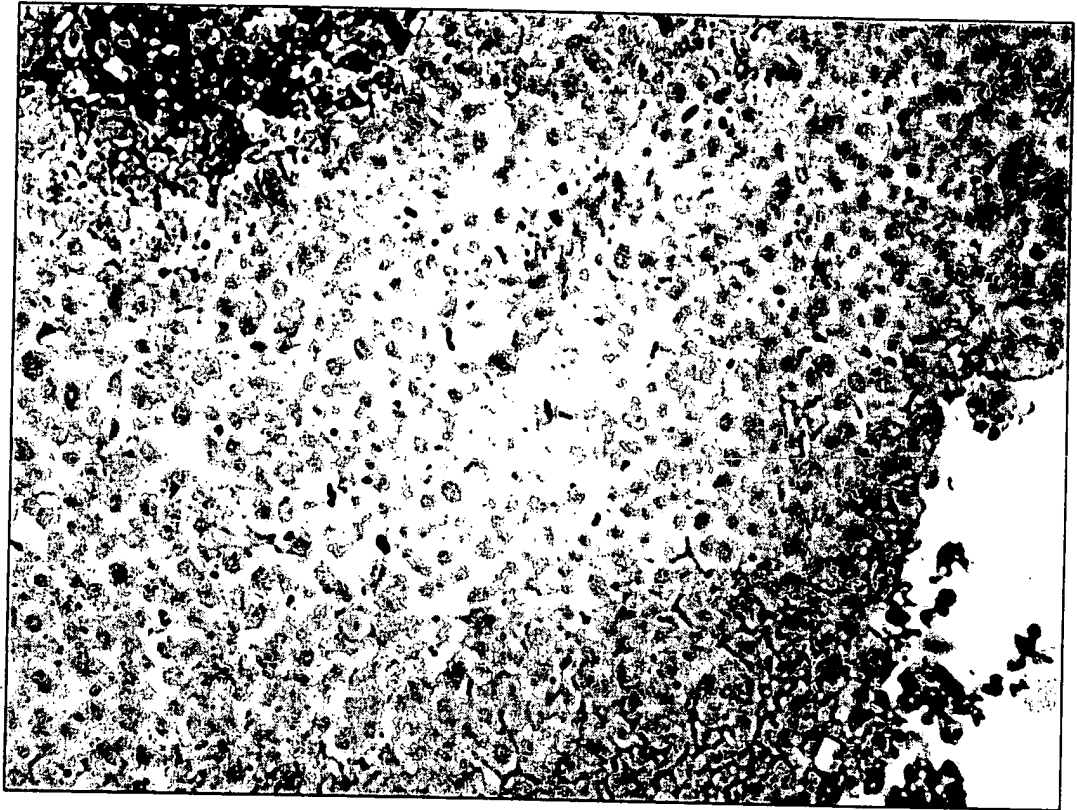


Figure 70

# PSCA 3C5 MAb Localizes within LAPC9AD Xenograft Tissue

3C5 Treated



mIgG Treated

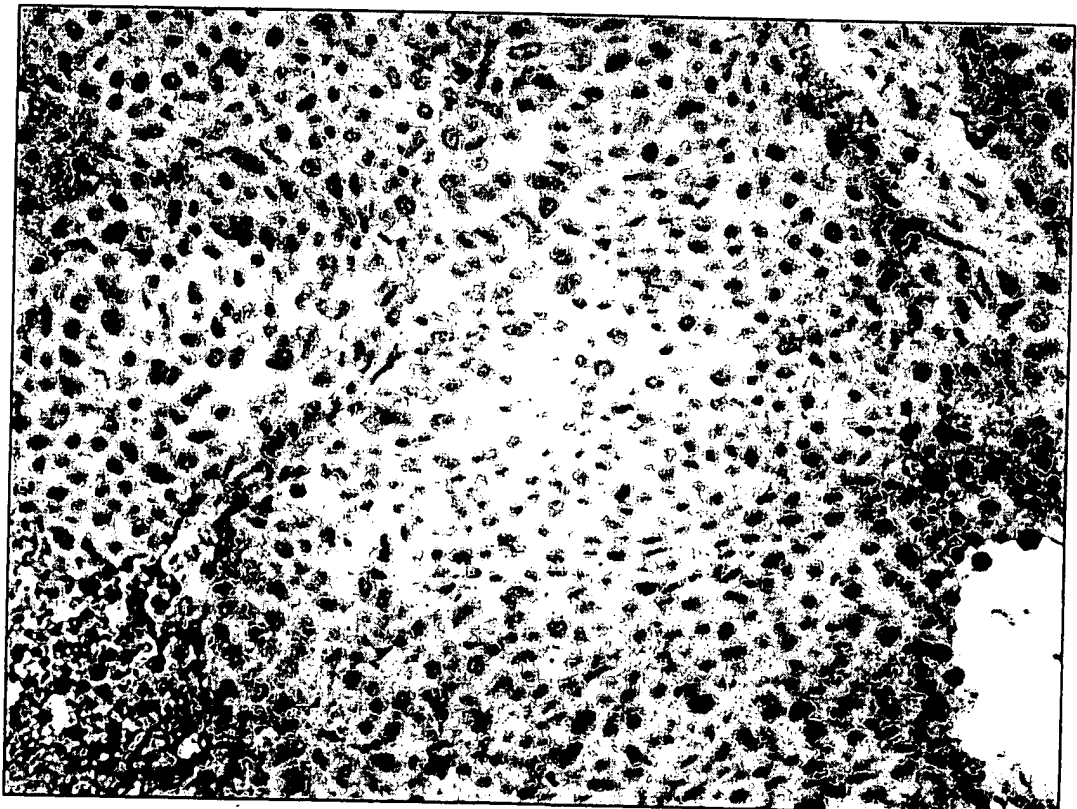
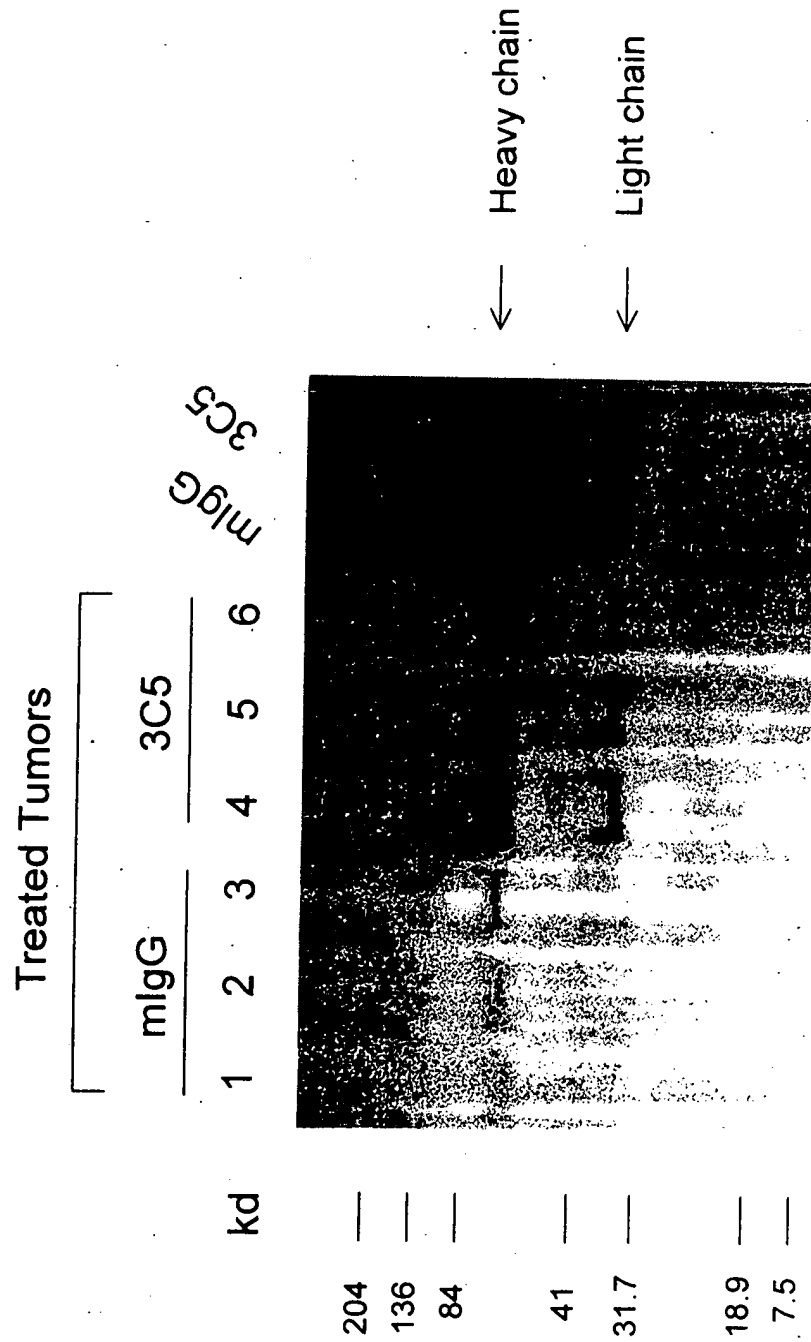


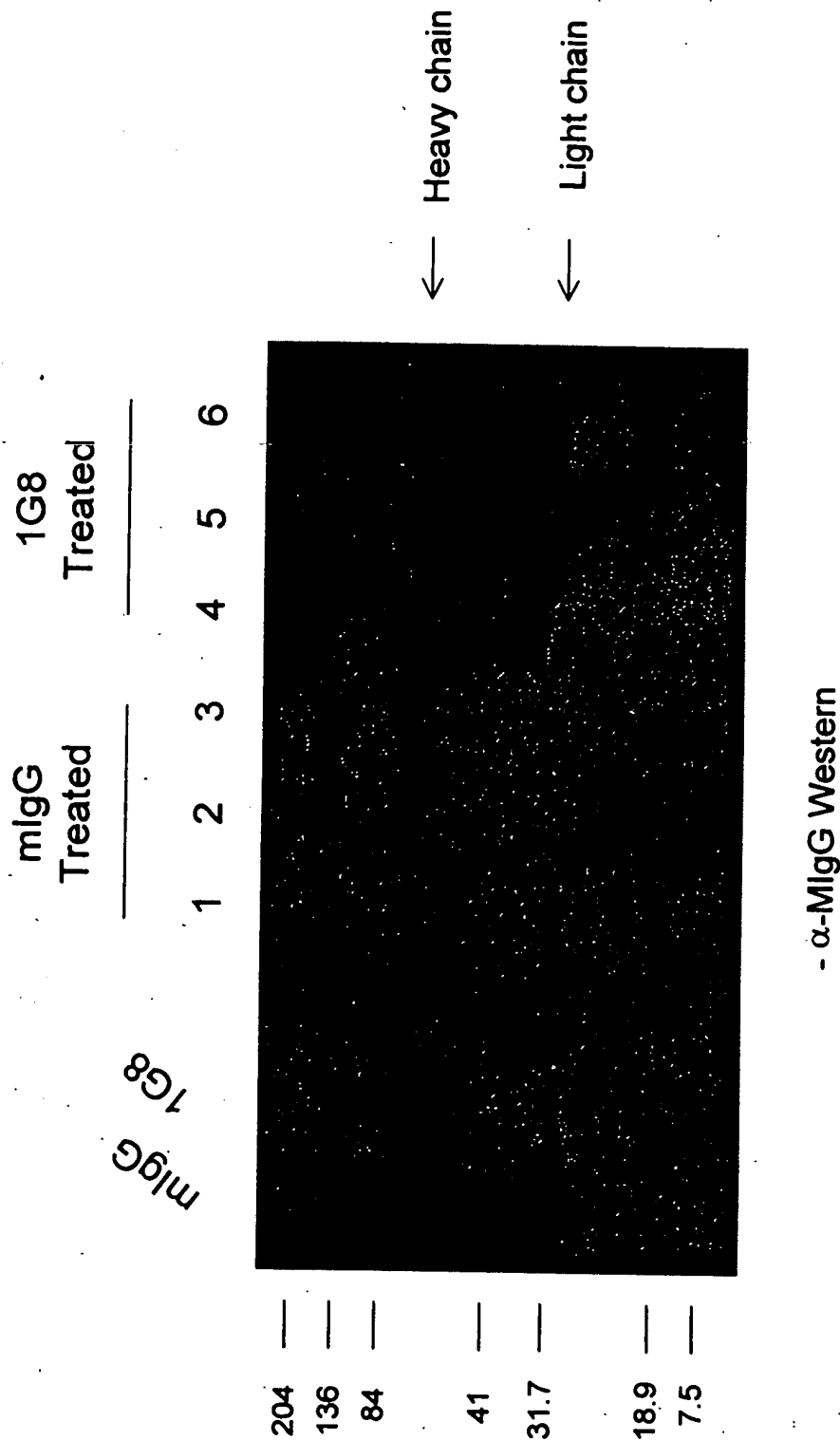
Figure 71

# 3C5 Anti-PSCA MAb is Localized to Established LAPC-9 Tumors



Western blot developed with  $\alpha$ -mlgG/k

# SPECIFIC TARGETING OF THE 1G8 ANTI-PSCA MAb TO ESTABLISHED LAPC-9 TUMORS



**M thod:** Mice bearing established LAPC-9 tumors (>100 mm<sup>3</sup>) were injected with either mIgG or the anti-PSCA MAb 1G8. Tumors were harvested a week later and made into protein lysates for Western analysis.

Figure 73